





Utah H2O-Economics -Utah's Chinese
Water Laws Hurting Jobs, Private Property Rights,
and Education Dollars

Draft-7

More Arizona/Nevada like Water Policies for Jobs, Increased Wages, Increased Taxes (Education Dollars), Decreased Housing Costs by Updating Utah Water Polices



- 1) Old, Out Dated, Inaccurate Water Duties are hurting Utah families \$8,000 more per house in Utah County
- 2) Permissionless Small Amounts of Water to Restore Conservative Private Property Rights.
- 3) The Federalizing of Utah's Water by BOR/CUP
- 4) Water Conservation Dollars in Exchange for the Use of Water
- 5) Consolidate the Division of Water Rights \$9mm budget and Water Resources \$6mm budget, cut work load in half by not micromanaging/over regulating small amounts of water, cut staff costs in half to save \$7.5mm annually

Questions on Utah's water-

Q: How are we managing Utah's 60 Million Acre-Feet of Water Worth \$140 Billion?



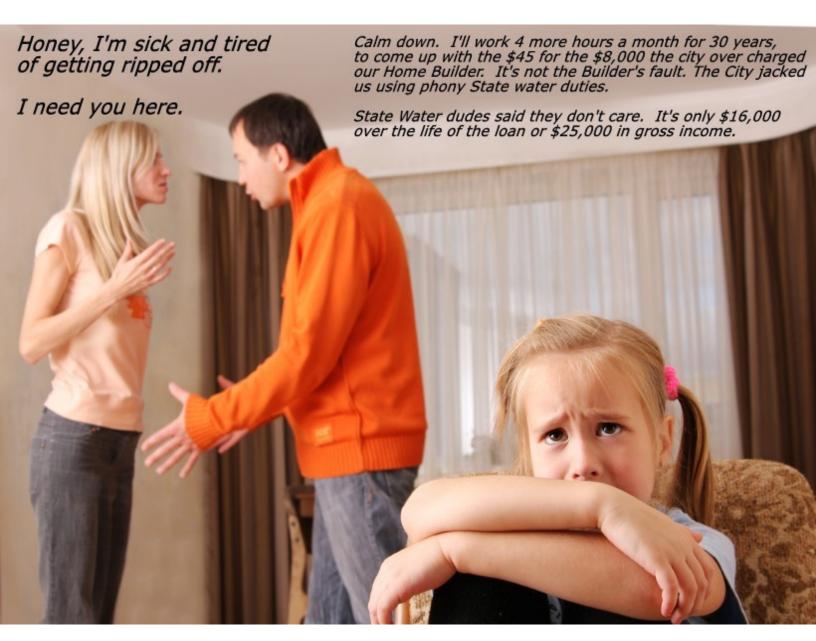
Q: Would you let a 4 year BS degree civil engineer manage \$140 billion of State assets critically supporting \$1 Trillion in State natural resource assets, the State's \$100 Billion economy, a 1.3 million job base and 1 million future housing units? Utah does. Sometimes great people aren't the right people for the job.

Q: Would you let an 8th grade history teacher manage \$1 Trillion in State natural resources assets critically supporting Utah's \$100 Billion economy, a 1.3 million job base and a million future housing units? Utah does. **Sometimes great people aren't the right people for the job.**

Q: What is the value of dry land? Nothing. Add water and its \$100,000 to \$1million per acre. There is not enough water for all land. Private Land owners like Kennecott's Day

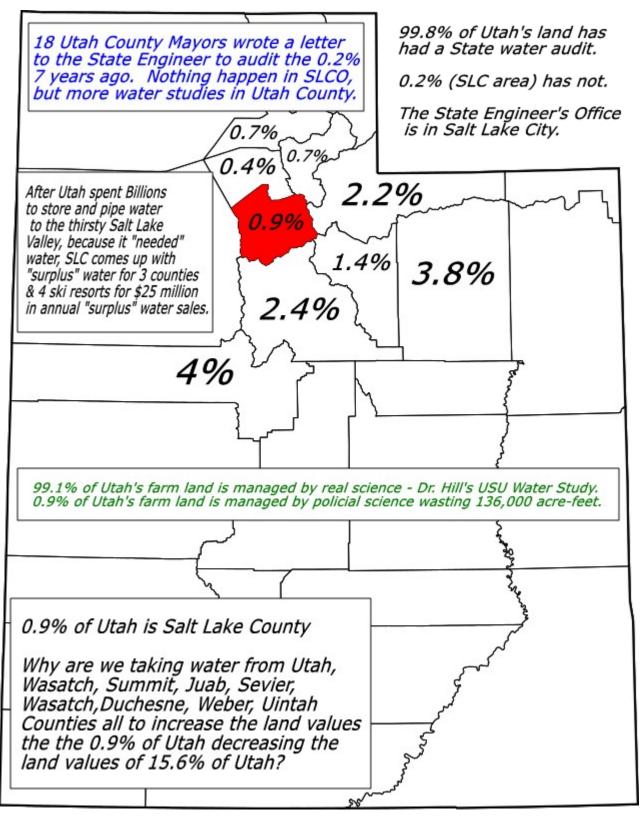
Break with the best political connections get the water and their land goes up 150 times in value.

Q: How can a private property owner have the right to plant a single tree that can consume 100 gallons of water per day, but not have the right to water without a permit for a house for 8.65 gallons of consumptive water per day? Since when has the State granted more water rights to vegetation than people? A big tree = 11.5 houses in water depletion/consumption.



Q: Why is land subsidence (over pumping of ground water dropping land) in Salt Lake County not conspicuously reported?

Q: Why is the CUP project already showing signs of hydrological failure?



Q: What happens to buildings sitting on subsidence weakened land in time of an earth quake?

A: Subsidence can substantially amplify and magnify the effect and damage of an earth quake, because the de-watered underground soil supporting the building is weakened but not yet failed. A little giggling and the underground de-watered soil can really move.

Q: Why is the subsidence in Salt Lake County a foot note instead of a headline?

Q: Does the public know Salt Lake Valley's underground water has dropped 50 feet? What does that mean in terms of water management polices and practices?

Q: Why is the CUP project already showing signs of hydrological failure? Q: Is the extra 25% political water bonus given in Salt Lake Valley dropping the water level and contributing to subsidence?

Good Water Policies

Q: How does Arizona with double the population, double the economy (\$200 BILLION AZ GDP) with about the same size Agribusiness foot print use **50% LESS** water per capita? Utah and Arizona have about the same green vegetation foot print.

Q: How come Nevada, the driest state in the US, gives all private property owners up to 2 acre-feet of well water (651,702 gallons) for free with no water permit, but Utah with almost double the precipitation makes you register a 201 gallon rain barrel?

Q: How did Lindon City get away with taking Walmart for an extra \$755,000 in water shares?

Q: Why is Jordan Valley Water Conservation District so efficient, so well managed, so non-political producing a treated acre-foot of water (325,851 gallons) for \$50 while Salt Lake City is so political (sued 2,500 parties over water, and initiated 1,750 water protects and produces a treated acre-foot of water for \$250.

Jordan Valley - \$50 for a treated acre-foot. Salt Lake City \$250 for a treated acre-foot. Jordan Valley treats dirtier Provo River water. Salt Lake City treats pure mountain water.

Q: Jordan Valley's retail water costs are half of Salt Lake City's. Why can't "surplus" county customers connect to Jordan Valley and cut their water costs in half?

Q: How come the U of U in SLC is charged over \$600 per acre-foot for water while BYU in Provo and UVU in Orem are charged \$200 per acre-foot for water? Why is Utah's major university paying triple for water?

Q: Why is storm water management a key to the land subsidence problems in Salt Lake County?

Q: Wells in Utah under 20 acre-feet (6.5 million gallons capacity) are not required to be metered or report pumpage. Why are permits even required for 8.65 gallons of depletion per day of 173 gallons diverted?

Q: 3 million acre-feet evaporate from the Great Salt Lake. ½ million acre-feet evaporate from Utah Lake. Why can't a private property owner evaporate 8.65 gallons per day without a water permit? The hydrology does not justify the over regulation of Utah's water against private property owners.

Q: If Utah could save \$ Million in water piping costs would they?

A: No. Engineering firms want the \$100 million in design fees even if there is a better approach, because they want the money and the check writers don't have the skill set to overcome the status quo of current water engineers providing services to Utah's Water Cartel.

Q: What happened to the CUP's plans to pipe water into Juab and Sevier County?



Q: Wasn't the primary purpose of the CUP to be a firming water supply (a back-up water supply) instead of a the primary water source?

Q: Why is the CUP is forcing cities into high cost water, rigid, take-or-pay water supply contracts restricted in favor of the CUP and against the cities.

Q: Why can't a city wheel its CUP water contracts to prevent waste or reduce costs? Who is writing these one sided, heavy handed, and lucrative contracts?

Q: Why hasn't the CUP provided a restoration program for the endangered species Rocky Mountain Cut Throat Trout in Utah Lake, the native habitat for the RMCT Trout?

Q: The CUP has spent \$50 million on June Suckers. What of the restoration of the Rocky Mountain Cut Throat Trout native to Utah Lake like the June Sucker?

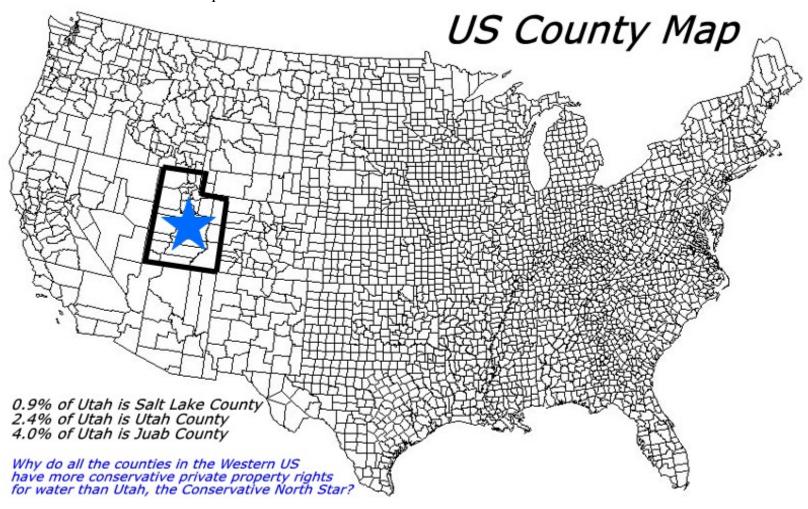
Q: City impact fees are to legally based on true impacts not impact plus a cities wish list

of goodies from "rich" developers where the goody costs are passed through to the consumer in their home mortgages. How are cities double charging Utah Home Builders for water and sewer? Why is the Division of Water helping cities overcharge Utah's Home Builders?

Q: What water policies are some cities exploiting to getting away with double charging Home Builders for water and sewer?

Q: Does the State audit city "cash in lieu" water sales?

Q: What "surplus" water is being sold if a city does not buy water but only collects water from developers?



Q: Would Utah's economy, jobs, and private property rights be better if Utah consolidated the Division of Water Rights and Water Resources, and cut the work load in half saving \$7.5 million by not over regulating and micro-managing small amounts of water? Would less micro-management of water increases the beneficial use of water?

Q: How much water is wasted by over regulation and micro-management of small amounts of water, the Division of Water Rights 46 forms, a 19 step water transfer process, and water cop inspections of a few cows in a barn?

Q: Since when did a 201 gallon "rain barrel" require Utah State Registration of Name, Address, and total capacity prior to construction? Why was SLC so opposed to rain barrels? Because it might impact their canyon water monopoly and Putin control of all development in "their" our canyons and reduce water bill revenue.

Q: Must every drop of water in Utah run through a meter for dollars if used by a citizen but not if used by a deer or tree or shrub? Why is Utah's new water policies squeezing dollars from citizens over drops of water by over regulation with a PayDay Lender approach to water management?

Q: How does a tree in Utah have more right to the beneficial use to deplete/consume up to 100 gallons per day¹ without a water permit, but a Utah private property owner has no right to deplete/consume 8.65 gallons per day for his house without a water permit?

How has the Great State of Utah, the Conservative North Star in the West, shifted so far to the left with radical, irrational, and non-science based water policies?

"Water-

In one day, one large tree can lift up to 100 gallons of water out of the ground and discharge it into the air.

For every five percent of tree cover added to a community, stormwater runoff is reduced two percent." - American Forests.org

Obviously, if a cabin's foot print removes 4 large trees, building the cabin would create new water supplies for up to 46 new houses domestic inside use. Utah's is the only state not to recognize this basic water fact. Instead, over regulates, and micromanages to enable government to take private property rights without just compensation by administrative regulations.

Q: If building a cabin in the forest creates new water for 46 houses, then why does the cabin need a water permit? The State should pay private property owners to build cabins instead of penalizing cabin building with a punitive water transfer process taking over a decade.

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Q: Why is the tolerance to take private property without just compensation by heavy handed over regulation of water increasing in Utah instead of decreasing?

Q: How can State Water Officials say they don't have the water for private land owners to deplete 8.65 gallons from 173 gallons per day when they give away136,000 acre-feet of water in the highest water demand and drainage covering Salt Lake County and Utah County, or allow 110,000 acre-feet application pend for 50 years, or 500,000 acre-feet applications pend for 40 years in a closed water basin? 136,000 acre-feet of water enough for 715,789 houses. How is there is "extra" 136,000 acre-feet water based on fake science, but not 8.65 gallons per day for a house in the same drainage?

Q: What cities are hoarding water? How do we tell without transparent inventories on a spread sheet viewable on the Utah Division of Water Right website?

Q: Does Utah some good water management practices?

A: Yes

Q: Are there improvements that can be made?

A: Yes

Q: Will state water administrators want to give up their power and authority to micromanage drops of water in Utah?

A: Most likely not.

Q: Could we have more effective and more efficient water management at half the cost?

A: Yes.

Q: How do other Western States view Utah's non-science based water policies?

Q: How do job creating corporations react to a non-science based management paradigm of the Utah State Engineer's Office?

Q: How do we prevent fraud in water sales when State Water titles are recorded in 30 different locations – 29 County Recorder Offices and 1 State Engineer Recorder Office?



A: Make the State Engineer's Record superior or controlling in the event of conflict with County records. Even though County records are supposed to forward deeds that

A tree in Utah has the right to deplete/consume up to 100 gallons of water per day without a permit.

A private land owner removing 4 trees to build a cabin has no right to deplete/consume 8.65 gallons per day without a permit.

Building his cabin, the private land owner creates/saves enough water for up to 46 new houses.



In Utah it can take over 25 years to get water for 1 cabin. State Water Engineer decisions are not science based.

transfer water they often don't or don't see the water right on a silent deed which passes water. The current system is ripe for fraud. Fraud has occurred because of this irregularity.

Q: How can State Water Officials be taken seriously on the issue of over appropriation (more paper water than wet water) when they allow SLC to hoard 400,000 acre-feet of water above SLC's 40 years future demand, allow SLC applications to appropriate 110,000 acre-feet of more water in Salt Lake County a closed basin (an amount equal to Deer Creek) to pend since 1963? SLC applications are not rejected, denied, or canceled.

Private applications for small amounts of water are rooted out of the system and summarily denied in a short time while water cartel applications to appropriate massive amounts of water in closed basins pend for 50 years?

Q: Year after year SLC runs legislation to overturn their loss in SLC v Big Ditch with bills like HB485 in 2012, SB109 in 2013, SB211 in 2014. Why is the State Engineer co-sponsoring big water user legislation against the small water user, yet we don't see

legislation denying all pending applications to appropriate water in heavily over appropriated closed basins. Why?

Q: How can the Division of Water Rights claim to be politically neutral when State Water Officials sponsors water legislation promoted by Utah's water cartel against the small users immobilizing Utah's water? Historically the State Engineer was a buffer and protector of the small user against the aggressive power of big water users.



Today, the State Engineer is hostile towards the small user in favor of the big user. What change? Why? What has the State lost?

Q: What can Utah do going forward to reduce water use regulations to improve jobs, the economy, private property rights, and increase education dollars?

Q: How much water's beneficial use is wasted due to long transfer times? 4 months for a water company to respond to a transfer request. Up to 12 months for company signatures, 2 months to file and advertise. 8 months for a hearing. Maybe 24 months for a water management plan. 3 months to 10 years for a decision. During this long 19 step water transfer process to "**provide order and certainty in the beneficial use of Utah's water**" (The mission statement of Utah Division of Water Rights) how much beneficial use of water is wasted? Ever since SLC disrupted Utah's water transfer process in 1994 in East Jordan Irrigation (SLC), Metro Salt Lake City, Provo River Water Users Association (SLC) v Payson City over 38.5 shares of water stock for city water use, the water transfer process in Utah has degraded wasting massive amounts of water.

Q: How is over regulation and micro-managing small amounts of Utah's water defeating the mission of the Utah Division of Water Rights?

Q: How many education dollars has Utah lost because of poor state water policies?

Q: Does Utah have a Water Cartel (H2O-pec) like OPEC?

A: Yes. It's well known in the industry and easy to spot by looking at the chronic water protestors and lawsuits.

Q: What has the State done to minimize Utah's Water Cartel impacts on Utah's water and Utah's economy (Jobs)?

Q: Why aren't cities selling \$25 million in goods and services like SLC outside their corporate boundaries outside their municipal duties subject to anti-trust, and the Fair Business Practices Act?

Q: When applications to appropriate pend since 1918 in closed water basins, how can one take the State Engineer seriously on the issue of over appropriation, zombie water rights, and subsidence?

Q: When an application to appropriate 500,000 acre-feet of water in a closed basin pends for 40 years, how can one take the State Engineer seriously?

Q: What should be done with the millions of acre-feet of applications to appropriate water in closed basins?

A: The Legislature should pass a law voiding all applications to appropriate water in closed basins to give the State Engineer political cover.

Q: What are the two largest lakes sources of evaporative loss of water in Utah?

A: Utah Lake with a surface area of 150 square miles and the Great Salt Lake with a surface area of 1,700 square miles (1,000 square miles to



3,300 square miles depth to 30 feet). The Great Salt Lake is over twice the size of Salt Lake County.

Q: What is the evaporative loss of water from Utah Lake and the Great Salt Lake?

A: 450,000 acre-feet from Utah Lake and an average of 2.8 Billion gallons per day (8,000 acre-feet per day or 3 million acre-feet of water per year.

In other words, the water that evaporates from the Great Salt Lake represents half of Utah's 6 million acre-feet of water use. Clearly, the Great Salt Lake is a key to future water supplies by reducing inflows.

Q: What is the annual in flow of water into the Great Salt Lake?

A: 1.1 to 9.1 million acre-feet of water or up to 90 Deer Creeks (Deer Creek is 100,000 acre-feet) worth of water in flowing to the Great Salt Lake. Salt Lake City can supply all it residents with half a Deer Creek. SLC water district MWDSLS owns 2/3 of Deer Creek or about 61,000 acre-feet.

Q: How come the size of the Great Salt Lake has doubled and the lake rose 20 feet if we don't have enough water in Utah?

Q: How is a city selling \$23 million in water outside its corporate boundaries not subject to anti-trust and fair business laws, but a \$100,000 business is?

Q: How have cities come to hoard so much water they are now asking to amend Utah's Constitution to they can make money off hoarding water?

Q: How much bio-mass is in Utah Lake? 150 square miles x 7.5 feet = 720,000 acre-feet of bio-mass or 234,612,000 gallons of bio-mass in the lake's silt bed.

A: Raw human sewage dumped into Lake as late as 1967. Dairy sewage may be still being dumped into Utah Lake today.

Q: Why is a public water supplier given a 40 year forfeiture window but a public food supplier only a 7 year forfeiture window?

Q: Why don't public food suppliers have automatic non-use application approval rights like public water suppliers?

Q: How did Utah's water cartel get automatic non-use application approval rights for themselves but stopped public food suppliers from having the same rights?

Q: Why is Utah's Division of Water Rights spending 50% of its resources micromanaging small amounts of water less than 2 acre-feet when other Western States don't? Utah Division of Water Rights spends \$4.5 million managing applications that consume/deplete as little as 8.65 gallons a day.

Note: Check out Water Right Change Application (a28548) approved for 0.373 acre-feet after 11 years then appealed by SLC in Third District Court. Check out Change Application (a35874) for 53,000 acre-feet of water for Blue Castle's Nuke Plant filed Aug/27/2009 approved Jan/20/2012 (27 months).

11 years for a Change Application for water for a cabin depleting 8.65 gallons per day the rest return flows and 2.3 years for a Change Application for 53,000 acre-feet of Nuke Plant water.

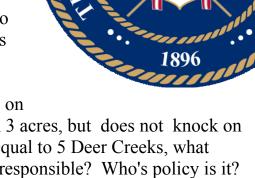
Q: Why are we allowing Utah Water Policies to rip off private property owners, home builders, schools, hospitals and corporations bring jobs to Utah?

Q: How much of Utah's 60 Million acre-feet of water is used?

A: About 6 Million Acre-Feet of water – 1 Million for Cities & Businesses (M&I), and 5 million for Agribusiness.

Q: How does a \$125 million piping project like Murdock Pipe Project actually waste water?

Q: Why is the \$125 million Murdock pipe restricted to 180 day use? Who's idea was it? What are the politics behind the restriction?



Q: When a Division of Water Right water cop knocks on your door to count 5 horses drinking a few gallons on 3 acres, but does not knock on SLC's door to count 500,0000 acre-feet water hoard equal to 5 Deer Creeks, what message is being sent? What State water manager is responsible? Who's policy is it? SLC's true water use is 10% of their holdings.

Q: Of Utah's 1.4 MILLION acre-feet of Colorado River water, How much has Utah used? How much is Utah Using? How much can Utah ever use? Where is this data found on the Utah Division of Water Right website in Reader's Digest format for public comment and legislative management?

Q: Why is Utah FEDERALIZING it's water resources by passing laws promoted by BOR/BLM/CUP and unduly pressuring state water employees?

Q: The Top Manager of the CUP is 83 years old. The Cylde's have managed CUP legal issues for over 50 years. What are the pro's and con's of dynastic management of Utah's water? Good things have been accomplished by the CUP. What improvements could be made? Why did Don Christensen insist his the former Top Manager of the CUP "retire" because of his advanced age of 75?

Q: Why should John Doe pay a CUP water tax on his property which will never receive CUP water to subsidize water to increase the value of Joe Brown's property?

Q: Whose private land will be dry and worthless and whose land will be wet and valuable? Who makes that decision?

Q: Salt Lake County represents 1% of the land in Utah. Is it wise water management to spend 80% of water dollars for the 1% of Utah's land? 2 million people in SL County nd 2 million people in 20 other counties. How is that going to work?

Q: Are we creating the toxic air in Salt Lake County bowl with expensive water projects into Salt Lake County?

Q: Why do to east side city in Salt Lake County except Draper has a pressurized secondary irrigation system? Pleasant Grove, Lindon, Highland, American Fork, and Lehi City have pressurized secondary irrigation systems.

Q: During one of the driest years in Utah, in October Utah Lake's dam was opened to release surplus water down the Jordan River to the Great Salt Lake to evaporate. What does that mean?

Q: Has the Utah Division of Water Resources "predicted" a 800,000 acre-feet per year water deficit in the basin needing to be addressed by conservation and new water development?

A: Yes. If we are letting millions of acre-feet of water evaporate from Utah Lake and the Great Salt Lake due to one use of water and return flow into the these lakes instead of multiple uses of water, then we need better water practices not new water development.

Q: When water is piped long distances from Spanish Fork Canyon to Salt Lake Valley and and used once before return flowing to the Great Salt Lake Lake, how is that wise

water management?

A: Water should be used over and over and over before entering the Great Salt Lake. For example, if 1,000 acre-feet were used in Mona for inside water use, up to 950 acre-feet could be used by Goshen, then 902.5 acre-feet by Saratoga Springs, then 857.375 acre-feet by Lehi, then 814 acre-feet by Draper City. The utility value of that 1,000 acre-feet can be used for 4,523 acre-feet or 4.5 times. If it is piped to the Salt Lake Valley, used in Salt Lake City, it's use is just 1,000 acre-feet. The utility value of 3,523 acre-feet of water use is lost. Utah's has plenty of water. Utah needs better water engineering, better oversight from the Legislature's House where the concentration of power over water is diluted away from Salt Lake County.

Q: Why is the State Water Resources run by Salt Lake City?

Q: Why has the State allowed Salt Lake City to hoard 500,000 acre-feet (5 Deer Creeks) worth of water to stop the ski interconnect for decades?

Q: Why aren't Snowbird, Alta Ski Lifts, Brighton Ski Resort, and Solitude water independent of Salt Lake City, an environmental extremist?

Q: How can Utah achieve 25% Water Conservation when Utah's water administrators refuse to update old, inaccurate and false water duties creating 100% water wasting?

Q: How can the Public trust the Utah Division of Water Rights when it used political math of 2 + 2 = 5 in 1 of 29 counties and and regular math of 2 + 2 = 4 in 28 of 29 counties?

Q: Has anyone seen 125,000 acres of flood irrigated crop land in Salt Lake County requiring 5 acre-feet of water per acre now or ever? No. Why are we pretending in the management of Utah's critical water resources?

Q: How does one of the richest and wealthiest water districts Metropolitan Water District of Salt Lake & Sandy get a \$500,000 State water grant when cities in rural areas are struggling to meet basic water demands and repaying water loans?

Q: Is there a potential conflict of interest for the State Engineer and Assistant State Engineer (Water Judges issues water Ruling worth millions) to golf, lunch and be wined and dined by the same parties seeking millions worth of water transfers?

Q: When the Division of Water Right employees sit in their offices and look over Salt Lake City, can they see why Salt Lake City needs to own 500,000 acre-feet of water when it needs less than 50,000 acre-feet?

Q: Why is the State Engineer actively re-auditing water rights along the North Bench of Utah County while Salt Lake City's water hoard has yet to be audited once?

Q: How is it that 242 cities water rights have been audited, but 1 of the 243 cities in Utah have not?

Q: Who is the real State Engineer in Utah? Kent L. Jones or SLC Water Director Jeffery T. Niermeyer?

Q: Who has the bigger budget, most lawyers, and political clout?

A: SLC Water Director Jeffery T. Niermyer with a \$125millin budget, 12 water lawyers plus city lawyers, plus multiple lobbyists. State Engineer Kent L. Jones has a \$9 million budget, 3 lawyers, and no lobbyists.

Q: Why hasn't the Utah Division of Water Rights collected water inventory data from Cities when this information is a public record and audited financial asset?

Q: How can city and water district water application be effectively processed by the Utah Division of Water Rights without city water inventories?

Q: Why can a private land owner Dry Farm without a water permit but not build a house consuming 8.65 gallons per day without a water permit? Dry farming uses 100 times more water than a house.

Q: Why does a tree in Utah have more rights tow water than a private property land owner for a house?

Q: Why is Steve Clyde the most powerful water lawyer in Utah?

A: Because of Clyde Dynasty - father Edward Clyde, son Steve Clyde, and grandson Johnathan Clyde have represented the CUP for over 50 years on no-bid professional service contracts for tens of millions of dollars. Temporary CUP board members are no match for a law firm with 50 years of institutional knowledge "advising" the board. Whatever the CUP wants. The Cyldes have done a great job. Others can build on their success. The CUP gets even water appropriations in closed basins, and non-use applications approved on zombi water rights sold to public for \$88 million dollars. If the CUP files a water application, the regional engineer may write the application for them, then write the approved memo on the application she filled out. Imagine a judge drafting a motion for a plaintiff, then ruling on the motion. What kind of a process is that? Is the CUP is too big like the too big to fail banks? There is no difference between money and water. The analogy fits.

Q: Is the CUP a primary drivers of Federalizing Utah's water in conjunction with SLC.

The CUP should be broken up. The CUP and water districts should be stripped of their property taxing authority. The cost of water should be felt at the tap, not hidden in a yearly property tax bill.

Utah is a semiarid to arid state - 2nd **Driest State** with an average 12.2 inches of precipitation from 5 inches of rain in the Great Salt Lake Desert to 60 inches at the top of northern Wasatch Mountains (Alta). Utah's driest year was in 1976 with 7.7 inches – wettest year in 1995 with 16.67 inches. Water is a vital life and economic resource. Utah has large areas closed to new water appropriations, yet still needs water to grow for jobs, increased wages, increased tax and education dollars while serving 2.7 million residents and a \$103 Billion state economy. Re-evaluating Utah's water management and policies will decrease poverty, increase jobs, and taxes.

The 4 Sources of Water are Underground, Surface, Re-use (Toilet to Turf, Toilet to Tap), and Air-Water Distillers.

How will Utah achieve 25% water conservation by 2025, or 50% water conservation by 2050 without updating wasteful domestic and irrigation water duties?

How will Utah protect its water from being Federalized without updating policies and practices of water mobility (water transfers under U.C.A. 73-3-3) which favor Federal junior water and disadvantage senior private water?

How will Utah have the water for jobs, increased wages, increased taxes and education dollars without adopting better water management practices from surrounding Western States like Nevada (1st Driest State) and Arizona (4th Driest State)?

How can a city in California (11th Driest State) use 46 gallons (indoors) per day per capita compared to a city in Utah (2nd Driest State) using 76 gallons per day per capita. There are a few water conscious cities like Blanding using 51 gpcd.

Q: Why must the State set accurate water conserving use standards in the form of domestic and irrigation water duties?

A: Because cities and counties overreach to overcharge home builders by using farming flood irrigation duty instead of an urban/residential irrigation water duty (sprinkler).

Primer on Home Building: Utah County City Planner,

"If you think we operate by ordinance and law, you're naive."

"There was no significant difference in gpcd found between rural and urban cities."²

^{2 2009} Residential Water Use – Survey Results and Analysis of Residential Water Use For Seventeen Communities in Utah – November 3, 2010 Utah Division of Water Resources November 3, 2010

Q: How do we promote a "long-term water conservation ethic in Utah" to conserve water if Utah's water duties are inaccurate and wasteful enabling the unethical treatment of home builders and residents?

A: Updated and accurate water duties will promote the ethical treatment of home builders and improve water conservation.

Q: "Why do we use so much water when we live in a desert?" That is a good question many ask including the Utah Division of Water Resources as its 2010 Water Report.⁴

A: Utah has outdated water duties, old water management policies, and the State has lost control of its water to Utah's water cartel.

Q: What would you do if your multi-million dollar real estate project could be delayed by a city over charging for water entitlements?

A: Most business people make a business decision and pay the overcharges and pass the increased costs on the consumer.

Q: Why are State water administrators so reluctant to update, streamline, and modernize Utah's water management policies with more accurate domestic and irrigation water duties which would save a household \$45 to \$90 per month over 360 house payments? This bread and butter issue for real working people in Utah.

A: Fear of losing their jobs. Utah's water assets are worth \$140 Billion. Utah's water cartel is made up of Billion dollar water companies like SLC, Metropolitan Water District of Salt Lake & Sandy, CUP, Jordan Valley, Weber Basin, Washington Water Conservation District – the Big 6 Water Cartel with dozens of lawyers, lobbyists, city (League of Cities), county (Association of Counties), state (Water Task Force) and federal (BOR/CUP)influence. Imagine sitting in your cubbyhole when lawyers of the Big 6 Water Cartel with VIP access passes come knocking on our door every week week in and week out, year in and year out. Eventually, you'll just cave in gracefully to keep your job for home mortgage, your health insurance, and your retirement.

Q: How can we give State water employees the political cover they need to survive is such an aggressive/hostile multi-billion water industry with thousands of protests, million dollar water lawsuits, and high power well connected water lobbvists?

A: Have elected officials like a House Select Water Committee set water duties, administrative water policies, and give annual public oversight reviews of the Division of Water Rights like Congress does.

There are many differing approaches to articulate the dynamic benefits of resulting from increasing Utah's water management efficiencies.

One may take the ethical approach – It's not moral for cities to use out dated water duties to

³ Dennis J. Strong, Director Utah Water Resources

⁴ Municipal and Industrial Water Use in Utah "Why do we use so much water when we live in a desert?" Utah Division of Water Resources

overcharged home builders, churches, schools, and business just to make more money.

One may take the scientific approach – Water science has become more accurate; therefore Utah's water duties have become more accurate. We must return to 2+2=4 scientific math instead of 2+2=5 political math. Government decisions must be grounded in science, math and sound policy and not emotion based - "I feel a Salt Lake County farmer should be 25% more water on 139,000 acres, because I'm afraid of losing my engineering job if I don't say 2+2=5.

The mathematical equations used for Salt Lake County and Utah County Irrigation flood duties-

SL County 2.12 acre-feet of depletion + 1.88 acre-feet of return flow = 4 acrefeet of irrigation

UT County 2.12 acre-feet of depletion + 2.88 acre-feet of return flow = 5 acre-feet of irrigation

Q: What is the significance of 2.88 instead of 1.88?

A: 136,000 artificial demand on Utah's water impacting Utah County public supply wells and a loss of \$250 million in water assets.

Q: What is the elevation difference between Utah County and Salt Lake County?

A: About 10 feet.

Q: Same soils. Same elevation. Same crops. Same growing season. Salt Lake County get 25% more water in their irrigation duty creating an impact of 136,000 acre-feet of water wasted to the Great Salt Lake to evaporate and leave Utah with no benefit.

Q: Is the diversion of water not used for any legally described beneficial use some kind of "beneficial use"?

A: No. Why is diversion of water a beneficial use of water in Salt Lake County?

Q: How big Salt Lake County compared Utah Count, Juab County, Seveir County.

A: Salt Lake County is 808 square miles. Utah County is 2,141 square miles. Juab County is 3,406 square miles. Sevier County is 1,918 square miles. Why are we robbing the property values from from large counties in favor of such a small county as Salt Lake County?

Q: What percent of Utah is Salt Lake County? A: less than 11%

A: Why should less than 1% of Utah's land (Salt Lake County) get most of Utah's water supplies (Weber River, Provo River, Bear River, Utah Lake, Colorado River).

Q: Why should 99% of Utah be de-watered in favor of 1%? Why is the 1% our land getting 100 to 500 times value increases while other land is de-valued and tax to subsidize the water for the 1%?

Q: What county is the next Utah County?



A: Juab. Where will Juab get water to grow like Salt Lake County if Salt Lake County has hogged it all via the State Engineer, lobbists, and a failed CUP project?

When State Engineer's use political math instead of real math, the integrity of the Office of the Engineer erodes. Public trust is lost. There is no science to support increasing the co-efficient of 1.88 to 2.88 other than political science. The The economic impact of the 4-5 duty issue is \$250 million and impacts Utah County Public Water Supply wells.

The layers of conflict of interest, cronyism, self interest intertwined over time require we look outside Utah's water box for better ideas to re-center Utah's water laws in favor of senior private water rights, the right to small amount of water without a water right, the right to rain barrels without limits reporting, the right to accurate up to date water duties.

One may look at how other Western states are managing the issues of public water, private property, and beneficial use of water. **Arizona - 4th Driest State** gets 13.6⁵ inches of rain on average (113,909 square miles with 350 square miles of water surface is a good Western state to consider for better water policies. Yuma Arizona is the driest city in the US with average rainfall of 3.01 inches.

To examine model water management one needs to look no further than south to Arizona. Using roughly the same amount of water as Utah, Arizona serves more than double the population, has double the economy, more conservative private property rights with increased private land values. That's a GOP water management success story.

Q: How has Salt Lake City (Democrat) gotten Utah's GOP to constantly run SLC water legislation which never has SLC's name on it?

Q: How does Arizona (the 4th driest State in the US) having more water use half the water per capita than Utah?

Q: Does Utah does have a water shortage?

A. No. Utah has a water management shortage.

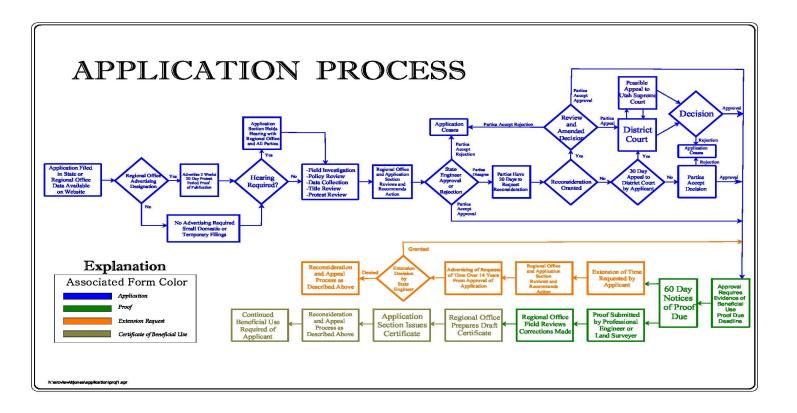
Below are some data points and questions for Utah to enjoy a significant increase in support of its lifestyle/economy, public food providers (farmers), and private property rights.

Arizona exemplifies the best water law and best practices of efficient water management in the West. Arizona's State Motto is Ditat Deus (God enriches). Arizona's state flower is the saguaro cactus. Arizona recognizes and fortifies private property rights in the West as the foundation of liberty including accurate water science together with the right to a small amount of domestic water without a water right for all private property owners.

⁵ Current Results research new & science facts http://www.currentresults.com/Weather/US/average-annual-state-precipitation.php

Arizona does not micro-mange small amounts of domestic water, does not waste its water management dollars on small amounts of water, but has streamlined and automated its water processes to increase property values (tax dollars), and conserve water.

Q: Have you seen the 19 step Flowchart⁶ of Utah's water transfer process that can take over 10 years for



cabin water? It's a 19 step process easily gamed by Utah's water cartel. Supreme Court cases are processed faster than water transfers in Utah. Utah should have 30 days transfers with no court appeals of decisions. All water rights owner have full access to the courts for impairment why grant special access for transfers? It makes no sense and front loads the process with lawyer's mischief.

Nevada and all Western US States allow all private land owners a small amount of domestic water without a water permit or a permit is available to all for a few dollars. Utah-One of the West's great states is the sole exception with China like water policies.

Water Issue 1:

⁶ http://www.waterrights.utah.gov/wrinfo/policy/apschem.pdf

Old, inaccurate, and false water duties are being gamed through water cronyism to stop selected developments, and to overcharge home builders, churches, and out-of-state corporations by cities to "make more money" millions of dollars unjustly taken from Utah citizens.

Q: How can Utah cities justify charging home builders, apartment builders, commercial builders, and out-of-state corporations 0.45 acre-feet (400 gallons per day) for a 2,000 square-feet house, a cabin, a 700 square-feet apartment when Utah State water scientists' reports indicate 0.19 acre-feet (173 gallons per day) is the true average inside domestic water use. Moreover, Utah is seeking a water conservation target of 25% by 2025. The State domestic water duty target by 2025 would be about 0.145 acre-feet (130 gallons per house), so why are we charging 0.45 acre-feet?

A: Inaccurate, out of date, and false State water duties.

Q: How long has the urban/residential irrigation issue (disparity) been around?

A: At least since 1998, "A strong focus of this research is the irrigation of residential turf areas. In the summer of 1998, division staff began investigating indoors versus

outdoor water use.⁷

WAL*MART SUPERCENTER

Q: Why is Utah still demanding 400 gallons per day for a house, a 700 square foot apartment, and a cabin when the true figure is173 gallons per day and declining?



A: In part because of undue

political pressure from SLC to require 400 to 800 gallons⁸ per day for a cabin permit plus 210,000 gallons (1750 gpm for 2 hours) for fire protection⁹ to create a regulatory super barrier of entry to build in the canyons by undesirables. And in part because cities make "extra" money from its "surplus" water business in 3 counties outside SLC corporate boundaries. While SLC has granted over 4,000 water connections in Big and Little Cottonwood Canyon to most ski resorts and Alta, SLC feels impelled to micromanage and stop all other building in the canyons on the basis of "watershed protection."

Q: Are current Utah domestic and residential irrigation duties enabling cities to overcharge Utah Home Builders, Utah churches (Catholic, LDS, Muslim), out-of-state companies like Walmart, Adobe, Micron, Microsoft?

^{7 2001} Identifying Residential Water Use – Survey Results and Analysis of Residential Water Use for Thirteen Communities in Utah Revised July25, 2002

^{8 &}quot;3. There is an insufficient water supply to meet the State Regulations that require 800 gallons per day for a residential dwelling or structure." October 5, 2010 Salt Lake City Letter to Town of Alta

^{9 &}quot;the Fire Department requirement of 1750 gpm, (at a residential pressure of 20 psi, for a duration of 2 hours" September 14, 2011 Salt Lake City Letter to Town of Alta and Department of Environmental Heath

A: Yes. Cities use State water duties as the basis to calculate their water and sewer entitlement charges.

Many cities charge so many water shares or so many acre-feet of water right or so much water contract per developed acre. For example, an acre of ½ zoned land in Lehi requires about 3.7 acre-feet or 1.42 shares of Lehi Irrigation. A share of Lehi Irrigation costs \$10,000 to \$13,000 per share.

Q: Can big corporations trust Utah's water policies to treat them fairly and in a science based way?

A: No. Utah's water duties are not science based. City water entitlement charges are not science based.

Q: Is it true that old, inaccurate, and false water duties cost Utahns billions of dollars?

A: Yes. Since 2001 and going forward on 1 million new housing units, commercial buildings, schools, and churches the increase per housing units is up to \$8,000 per housing unit.

Q: How much did undue pressure by Utah's water cartel on one regional water engineer at the Division of Water Rights cost the State of Utah?

A: \$278 million – The Harold D.Donaldson (285 Hoyt Lane Coalville, UT 435-336-5664) decision to give Salt Lake County farmers an extra 25% water bonus based on politics impacting Utah County public supply wells and future water sources.

Q: Are Utah's top water administrators aware of the inaccurate water duty issue issue?



A: Yes. If one calls the State Engineer Kent L. Jones (801-538-7371 kentljones@utah.gov), he'll say, "It's a Division of Drinking Water issue." If one calls the Division of Drinking Water Director Ken H. Bousfiled (801-536-4207 kbousfield@utah.gov), he'll say, "It's a State Engineer issue." If one calls, the Director of Water Resources Eric Millis (801-538-7230 ericmillis@utah.gov), he'll say, "It's a State Engineer issue."

This round robin is no comfort to the citizens of Utah who bear the economic burden of increased costs due to misunderstanding the direct impact to family wallets of seemingly insignificant actions and inactions by water administrators.

Q: How much are cities overcharging home builders, churches, schools, in-state and out-of-state business?

A: About double, triple and even 5 times the real water use amounts.

Q: How much money can a city make by overcharging?

A: It depends on the City. Lehi's overcharge is about \$10,000 per acre on ½ zone land. In Lindon, the overcharge is about \$20,000 to \$24,000 per acre. 50 acres developed in Lindon makes the city an extra million.

Q: How much can overcharging due to inaccurate water duties increase the cost of a 300 unit apartment project?

A: The overcharge is calculated by the amount charged of 0.45 ace-feet – the real domestic duty of 0.19 acre-feet acre-feet = 0.26 acre-feet x 300 = 78 acre-feet @ \$5,000 per acre-foot is \$390,000 overcharge for water and another \$390,000 for sewer based on the water overcharge. The overcharge is much larger because each unit can be charged .25 per acre-foot for outside watering for 75 acre-feet enough to sprinkle 44 acres of lawn. A 300 unit apartment will not have 44 acres of lawn but maybe 8 acres, so the outside water calculation creates another overcharge of 61.4 acre-feet @ \$5,000 per acre-foot is 307,000.

Q: What does the overcharge mean in terms of borrowed project money?

A: It means on a 300 unit apparent project, the added cost is \$697,000 for water plus \$390,000 for sewer over charge doubles with interest over the life of the loan to \$1,087,000 from net incomes. This can double again as net dollars require up to \$2 of gross income. The impact to a 300 unit apartment in gross dollars can be \$1 million to 2 million of economic waste – no value is derived to the user for over payment.

Q: Why don't home builders, churches, and out-of-state companies complain?

A: They don't want to rock the boat while seeking land value enriching entitlements. Better to save time, money, and hassled by going along with the overcharge and pass it on to the buyer. Home

builders only have 30 days after a plat is recorded to challenge fees under Utah law.



Q: Why don't home owner complain about the \$45 to \$90 increase monthly costs over their 360 monthly house payments (\$8,000 to \$16,000 cost per house)?

A: The cost is hidden in non-science before their building lot is

approved.

Q: What water laws did Arizona pass in 1980 which supported Arizona's Gross Domestic Product growth to \$200 Billion using about half the water Utah uses?

A: The 1980 Arizona Water States found in Title 45 required by the Federal Government before funding Arizona

Q: How does Arizona¹⁰ have a \$200 Billion GDP, use only 7 million acre-feet of water for a population of 6.5 million when Utah has a \$103 Billion GDP, uses 6

¹⁰ Appendix C: Summary of Arizona Water Law and Management Arizona Water Atla Volume 1 http://www.azwater.gov/AzDWR/StatewidePlanning/WaterAtlas/documents/appendix_c.pdf

million acre-feet of water for a population of 2.8 million?

A: In 1980, Arizona was forced by Feds to get serious about water and passed sweeping legislation and efficient water policies.

In 2012, Arizona irrigated 888,613 acres versus Utah irrigated 1,104,257 acres. In 2007, Arizona irrigated 827,581 acres compared to Utah's 1,134,144 acres. From 2007 to 2012, Arizona's irrigated acreage increased 61,032 acres compared to Utah's decrease of 29,887 acres.¹¹



Arizona

??Q: Does Arizona have a Water Right Ombudsman Office?

??A: Yes – Utah does not. Attempts to add water to the Property Right Ombudsman Office have been defeated by Utah's water cartel.

Q: Is Arizona's better economy attributable better private property rights, better water laws and better water management?

A: Perhaps. Arizona and Utah use about the same amount of water for agriculture. Arizona has flood irrigation duties up to 8 acre-feet to the acre compared to Utah's highest of 6 acre-feet to the acre. Arizona can have 12 month irrigation season (check this data point??). Arizona recognizes conservative private property rights. Utah has allowed BOR/CUP/SLC to marginalize private property rights to water to zero.

Q: How does Arizona have double the population of Utah, hotter climates, and still uses on 7 million acre-feet of water compared to Utah's 2.8 million population using 6 million acre-feet of water?

A: Better water laws, better water management polices, better private property laws.

Q: Why does Utah still have inaccurate, outdated, and non-scientific water duties double water and double sewer charges to home builders, and commercial developers (new job creators) costing the State billion in lost jobs, lost property values, artificial cost increases in 360 monthly payment mortgages (30 year mortgage), millions in lost dollars to education from devalued State Trust Lands (SITLA), millions in increase school bond costs for artificial water charges by cities, and millions in increased church building costs after 2001 State water studies recommending updating water duties?

¹¹ Issued May 2004's 2012 Census of Agriculture United States Summary and State Data Volume 1-Geographic Area Series-Part 51 aC-12-A-51 Issued May 2014 http://www.agcensus.usda.gov/Publications/2012/Full Report/Volume 1, Chapter 1 US/usv1.pdf

A: Primarily because of SLC.

Licensed water engineer managing Utah's waters have duty care to look out for the interests of our families, singles, friends, job seekers enough to to update four of Utah's water management practices

- 1) to save up \$8,000 (\$16,000 in mortgage costs) per new home (\$45 to \$90 per month),
- 2) to free up water in closed water basins along the Wasatch Front,
- 3) to de-federalize Utah's water by speeding up water transfer and guaranteeing users of water the absolute right to transfer in 90 days.



4) to recognize private water rights as confirmed by Utah Supreme Court rulings and water policies of all Western States except Utah?

Utah	Arizona
2.7 million population	6.5 million population
113,956 square miles (73 million acres)	82,169.82 square miles (54 million acre)
12.2 inches of precipitation average	13.6 inches of precipitation average
Uses 6 million acre-feet of water	Uses 7 million acre-feet of water
2.2 acre-feet per capita used	1.07 acre-feet per capita used
From 2007 to 2012, Utah's irrigated acres decreased 29,887 acres. 12	From 2007 to 2012 Arizona's irrigated acreage increased 61,032 acres
No small domestic wells without permits statewide. In closed basins – No permits at all. In open basins- permits granted for \$150	Well permits granted in non-Actively Managed Areas for Domestic, Irrigation, or Industrial. Notice fee is \$100. In Actively Managed Area small domestic permits granted for \$150
\$103 Billion State Economy	\$200 Billion State Economy
146,524 Veterans	530,693 Veterans
13,007 Building Permits (2012)	21,726 Building Permits (2012)
33.6 persons per square mile	56.3 persons per square mile
\$13,730 Retail sales per capita	\$13,637 Retail sales per capita
3.09 persons per household (2008-2012)	2.66 persons per household (2008-2012)
\$23,794 per capita money income (2012 dollars)	\$25,571 per capita income (2012 dollars)

¹² Issued May 2004's 2012 Census of Agriculture United States Summary and State Data Volume 1-Geographic Area Series-Part 51 aC-12-A-51 Issued May 2014 http://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1, Chapter_1_US/usv1.pdf

\$58,164 Median household income	\$50,256 Median household income
12.1% persons below the poverty line	17.2% person below the poverty line
996,693 housing units	2,871,423 housing units
21.5 minutes Mean travel time to work	24.6 minutes Mean travel time to work
\$217,800 median value of owner-occupied house	\$175,900 median value of owner-occupied

Utah wants to take back the property rights of 60 million acres promised to Utah by the Federal Government when Utah accepted the offer from the Federal Government to join the United States. The failure of the Federal Government to transfer title to 12 Western States which joined the Union has created many costs. Utah itself must update its own water science, to improve the mobility of water to de-federalize Utah's water, and to recognize (give back) insignificant small amounts of water wrongfully withheld from private property owners without access to city water lines.

Unlike any other Western State seeking state sovereignty over state lands, Utah is the odd state out that does not allow a little water for a house and garden without a permit.

A citizen of Utah owning land without access to water lines is prohibited from using 8.65 gallons of depletatable/consumable water per day without a permit. The balance of the water (164.35 gallons) diverted is returned to the drainage as return flow.

In 2009, the LDS Church spent \$62 million for 10,000 acre-feet of water of CUP contract water. Incorrect, inaccurate and outdated domestic and residential irrigation duties doubled the amount of water being charged the LDS Church for development. The LDS Church will be over charged \$31 million for water alone in just one city – Saratoga Springs. The LDS Church will also be over charged another \$31 million for sewer capacity it won't use but must buy because state water duties are the basis of calculating sewer capacity use charges.

The adverse impact of outdated, inaccurate water duties doubles the cost to the LDS Church of up to \$62 million in one Utah city alone because the corresponding sewer charges are based on inaccurate water duties.

Extrapolate this overcharge from 2001 to present and forward against all Utah home builders, commercial developers, school districts, churches, etc and the economic impact is in the billions of dollars.

One can easily see that over the past decade, the failure to update inside domestic and residential irrigation duties has cost families, businesses, schools, hospitals, and churches hundreds of millions of dollars of private property wrongfully transferred to government entities without just compensation.

1 million new homes with just \$1,000 in extra impact fees is \$1 Billion in extra costs alone. For some houses, the impact is \$8,000 per home.

It's easy to see the \$62 million overcharge to the LDS Church. Let's look at a job creator like Walmart's experience with Utah water laws in Lindon. Walmart Supercenter Store #5270 Inc 585 N State Street

Lindon, Utah developed 25.89 acres today valued at \$15.3 million (Utah County Tax ID: 45:371:0021).

What does Walmart tell other out of state job creators about Utah's water laws? "Great State. Great workers. Great Governor. But we got ripped off on water. Be careful when dealing in Utah on water issues. Utah has shady water policies."

Here's the math: Lindon City charges 1 share of North Union (7.6 acre-feet of Class A Provo River Water with an 1848 priority) per acre.

Walmart Supercenter was charged 25.89 shares of North Union Irrigation (25.89 x 7.6 = 196.764 acrefeet or 64,115,746 gallons or 5,342,978 gallons per month).

Lindon City's commercial water usage in 2013 was 181 commercial water connections using a total of 252.99 acre-feet¹³.

Walmart Supercenter has 1 of the 181 commercial water connection and was charged 196.764 acre-feet while using just 600,000 gallons (1.8 acre-feet of water) for culinary and \$422 per month for secondary to irrigate 31 acres (\$50 monthly plus \$3 per $\frac{1}{4}$ acre) = \$422.00. Irrigation rate is based on total size of parcel not landscaped area.

Walmart Supercenter is 209,000 square feet with 4 urinals and 15 toilets, and 1 acre of greenhouse area using 512 gallons per day of culinary water. Outside watering is low water bark and tree strips plus 1 acre of grass. 1.7 acre-feet for the grass and another 1.7 acre-feet from drip for trees double for good measure to 6.8 acre-feet of outdoor water.

It's safe to say, Walmart Supercenter in Lindon, Utah uses less than 8 acre-feet annually, but were charged 196.764 acre-feet in water shares.

Q: Why does Lindon City overcharge home builders and commercial builders for water when they have real water use data from their meters?

A: To make money - \$755,000 over charge to Walmart Corporation at \$4,000 per acre-foot. The "surplus" water is sold to developers who are overcharged, and re-sold again and again.

At \$24,000 over charge of water, and \$24,000 over charge for sewer, that's up to \$36,000 in extra costs per acre based water duties which are known to be false by state water administrators.

We are not asking for disruptive change, but recognition of existing laws, science and water policies.

Not asking to change the water world in Utah, just update domestic and residential irrigation duties to cut up to \$8,000 off the price of a new home or \$16,000 off the cost of a 30 year mortgage.

Just asking for State water administrators to recognize Utah Supreme Court rulings on private water rights.

¹³ Utah Division of Water Rights 2013 Public Water Supplier Information link http://www.waterrights.utah.gov/cgibin/wuseview.exe?Modinfo=Pwsview&SYSTEM_ID=1054

Cities like Lehi and Lindon are over charging home builders for water shares and water right by as much as \$10,000 to \$24,000 per developed acre.

Here's the math for Lehi City-

In 2013, Lehi City reported to the Division of Water Rights 13,679 domestic water connections using 2,880 acre-feet of water. 2,880 acre-feet of water divided by 13,679 connections is 0.21 acre-feet needed per house NOT 0.45 acre-feet being demanded.

Residential Irrigation (lawn and landscape) watering uses about 1.7 acre-feet per acre of land. Cities are charging a farmer's flood irrigation duty of 4, 5, and 6 acre-feet to home builders.

It takes 1.7 acre-feet to sprinkler an acre of ground in the city. It takes 4 to 5 acre-feet to flood irrigate a crop. An acre-foot of water in Lehi costs \$5,000 and soon \$6,000.

1.7 acre-feet per acre of land (75% of which is not covered by a hard surface for house foot print) means 1.275 acre-feet of water is needed per acre plus 1.73 houses per acre (1.73 x .21 acre-feet per house) = .36 acre-feet for inside water and 1.275 acre-feet for outside water. Lehi City charges 3.7 acre-feet of water entitlement per acre when the real number based on real firm water use data is 1.635 acre-feet. Lehi City is overcharging 2 acre-feet of water per acre (an extra \$10,000 to \$12,000 per acre) developed for residential. For apartments, the overcharge is even higher.

Here's the Math for Lindon City, Utah – (Note: Lindon uses State Water policies to ban watering in the day "No outdoor watering during the hours of 10:00 a.m. To 6:00 p.m." - This policy is in compliance with State watering guidelines"

Lindon City is the worst offender of cities overcharging water. Lindon charges up to 7.6 acre-feet in form of one North Union Irrigation shares, or half a Provo Bench Canal Company per acre. The overcharge in Lindon is about 5.9 acre-feet or \$23,600 per developed acre. The "surplus" water is resold as "water credits" to developers as "cash in lieu" of shares.

Water is expensive especially CUP water which costs \$7,000 per acre-foot in Eagle Mountain plus the annual hundreds of dollars per acre-foot fee. The CUP contract price per acre-foot in Saratoga Springs was \$6,200 plus hundreds in per acre-feet annual fees.

The CUP sold \$17 million in water last year and collected \$50 million in water property taxes.

Property taxes should not be used to fund the CUP, because it unjustly subsidized one mans water at the expense of another.¹⁴ I pay a CUP water tax on property which will never receive CUP water so the house in Day Break get cheaper water. I am paying for my own water, and paying a monthly CUP water fee in my water bill, plus my land pays a CUP water tax to fund water in areas like Day Break.

"For several years many organizations and elected leaders in Utah have been calling for the end of property tax subsidies for water delivery in the state. They have argued that the full costs of water should be contained in the water bill to ensure that consumers are motivated to conserve water in a desert state. When a portion of the cost of water is paid through property taxes, the water bill appears

¹⁴ Time to Remove Property Tax Subsidies for Water by Howard Stephenson November 18, 2002 Utah Tax Payers Association

artificially low, and motivation to conserve is lessened." - Howard Stephenson Utah Tax Payers Association

More accurate water duties mean more water conservation. Why would a water hoarding city demanding double and triple in water rights/shares have any desire to conserve? It's is raking in surplus water for "surplus" water sales. Lindon City can make an extra \$24,000 per acre in "surplus" water credit sales to developers and has done so for decades. It's good money and lot's of money. The State has a duty to curb this poor municipal behavior of gouging developers who pass the costs on to families, schools, businesses, and churches.

Q: What does it cost per month to a family over the life of a 30 year mortage?

A: On an \$8,000 over charge, from net income it costs \$45 per month and up to \$90 per month from gross income depending on taxes like self-employment tax. (clean up)

In summary, old crony relationships cultivated in the swamp of self interest need to be set aside to reduce home costs, reduce mortgage costs, reduces the infringement of private property right owners to use their land for themselves (housing).

Utah has 1 million water meters which usage is reported to the Division of Water Rights on a Water Use Data form annually. With better questions, this report would provide valuable data points at no cost to the state year over year. For example, if culinary water usage is broken down by month and secondary totalized against acres irrigated, a true domestic duty and residential irrigation duty could be derived simply at no cost. We are not asking the right questions. We are not getting the right answers.

Utah's goal of 25% water conservation by 2025 is at cross purposes with the State is enabling & encouraging Cities to over charge for water using old, inflated, and false State water duties.

"I understand I need to buy a water right. How do I go about it?

Answer: Water rights are classified as "real property" in the state of Utah and are bought and sold much like real estate. Many real estate agencies will have listings for water rights much as they do for properties.

First, you should determine where you intend to use the water ("the place of use") and how you will use the water ("the beneficial uses"). These two factors will largely determine the area in which a suitable right may be purchased and how large an interest in a right you will need. Specific policy guidelines for different areas in the state are available at this link.

For example, if you need water in the northern portion of Cedar City Valley for a single family residence (one family domestic use), two head of livestock (cows or horses or equivalent in sheep, goats, barnyard fowl, etc.), and irrigation of about 1/8-acre of landscape, garden, etc., you will need to purchase an interest in a northern Cedar City

Valley water right sufficient to provide for a diversion allowance of about 1.0 acre-foot. This estimate is based on current standard requirements of 0.45 acre-foot for domestic (indoor only) use, 0.028 acre-foot for stockwatering of one cow or horse (or equivalent) and 4.0 acre-feet per one acre of irrigation¹⁵." - Utah Division of Water Rights website June 3, 2014.

Where is the science to support the critical water duty declarations made by the Division of Water Rights?

To this day, the Utah Division of Water Rights is still using old, inaccurate, and false water duties which are harming Utahns.

Water Issue 2 -

Summary of surrounding Western States' position on small domestic wells without the need to buy a water right even in closed basins.

Not only are inaccurate water duties are very expensive to Utah home builders. Private property owners can't build their homes on county lands because the State water managers won't recognize as little as 8.65 gallons of depletable water per day per house.

"A fairly easy way to understand the difference between diversions and consumptive use is to visualize water use at a typical home. Indoor water use only consumes 5 percent of the metered water. The remaining 95 percent runs down the drains and is treated, then is returned [return flow] back to the natural system." 16

This means the average house buying 173 gallons of water metered water, returns 164.35 gallons back to nature and evaporates (depletes/consumes) 8.65 gallons.

A house depletes/consumes about 8.65 gallons of water per day (5% of inside water is depleted – 95% returns to the drainage basin)¹⁷. 164.35 of the 173 gallons used by an average house returns to the water basin.¹⁸

Question: How many tax dollars are being lost to education, health care, etc by private property devalued by Utah's de-watering of private land laws and policies?

¹⁵ http://www.waterrights.utah.gov/wrinfo/faq.asp

^{16 2009} Residential Water Use – Survey Results and Analysis of Residential Water Use For Seventeen Communities in Utah November 3, 2010 Utah Division of Water Resources Report prepared by Todd Adams, Assistant Director of the Utah Division of Water Resources and endorsed by Dennis J. Strong, Director of Water Resources. http://water.utah.gov/Reports/RWU_Study.pdf

¹⁷ Same as footnote 12 above

¹⁸ Identifying Residential Water User Survey Results and Analysis of Residential Water Use for Thirteen Communities in Utah January 2, 2001 http://www.water.utah.gov/M&I/PDF/Residential%20Final1.pdf under the direction of D. Larry Anderson director of Utah Division of Water Resources, and supervised by Lloyd H. Austin, chief of Resource Inventories and Special Studies Section.

For example, if dry piece of private land is worth \$35k, but \$2 million with an Arizona/Nevada/Colorado/California/Wyoming/Idaho styled policy, then Utah's tax funding would \$32,934 annually based on SL County mill rate of .016467 of which \$16,836 goes to education.

There are hundreds of millions in private property values waiting to be unlocked and taxed for the public good if Utah upgrades to Arizona/Nevada (Western States) styled water laws. Our ski resorts would have been interconnected being a better economic engine years ago if Utah had kept their water laws and policies as they were before SLC/CUP concentrating water in to fewer and fewer hands (their hands) at the expense of the public good.

Extrapolate the example across Utah, and one can easily see that Utah's non-conservative water laws and policies are very expensive in terms of dollars lost to education, government as well as the significant loss of and private property rights.

8.65 gallons of the 173 gallons per day on average used by a house in Utah is actually depleted or consumed, the balance 164.35 gallons return to the basin to be used again by others.

Oddly enough, a person can use unlimited amounts of water for dry farming, but no water for a house for himself. Dry farmers need no water rights regardless of the size of their farms. A home builder in the county must have a water right for a house. How does this make sense?

Utah - No Domestic Water Wells without a water right, water share or water contract from City, Water District or Federal government water (CUP) – No recognition of private property right to water – In Utah in Mona up to \$8,500 for a water right for inside use only - \$100,00 in Wasatch Canyons.

Nevada - Domestic Water Wells up to 2 acre-feet without a water permit — Yes recognition of private property right to water without a permit.

A water-right application or permit is not required in order to drill a domestic well. Domestic purposes as defined by law extends to culinary and household purposes, in a single family dwelling, the watering of a family garden, lawns, and the watering of domestic animals. The maximum amount of water that may be pumped from a domestic well is limited to two acre-feet per year.¹⁹

Colorado - Domestic Water Wells²⁰ – Lifetime permit granted for \$100 up to 15 gpm (21,600 gallons per day 24.2 acre-feet per year based on flow) – Yes recognition of private property right to water with a \$100 fee.

(Colorado Division of Water Resources 303-866-3587) Permit good for 2 years. Unlimited extensions upon requests are free.

"Ground water wells are the principle source of water for most homeowners in rural areas of Colorado. There are over 200,000 permits for ground water wells currently issued in our state and approximately

¹⁹ Nevada Department of Conservation & Natural Resources - http://dcnr.nv.gov/documents/documents/nevada-water-law-101/

²⁰ State of Colorado Department of Natural Resources Division of Water Resources Guide to Colorado Well Permits, Water Rights, and Water Administration http://water.state.co.us/groundwater/wellpermit/Pages/HHUOWell.aspx

4,000 new permits are requested annually. Most of these wells are used for households and are considered "exempt" from the administration within the water rights priority system. They require a permit from the State Engineer, and are limited to 15 gallons of water per minute. Some exempt wells are further limited to in-house use only when lot sizes are smaller than 35 acres."

Arizona - Domestic and Non-Domestic Wells in Non-Active Water Management Area FREE (\$100) - No Water Permit Required just Notice of Intent fee \$100 and use of Licensed well driller – Yes recognition of private property right to water for \$100 or \$150.

In Active Management Area (AMA) Exempt Well Permit Costs \$150 no water right required – pump up to 35 gpm of water enough for house, livestock and two acres (In Utah, that would be 8.5 acre-feet of well water for free by recognizing private property rights including the right to water without a water right.)

Arizona²¹ Domestic Water Wells – Lifetime permit granted for in side \$150 out side \$100 5 acres or less county approval not within 100' of septic or leach field

Exempt domestic more than 35 gpm for house, yard, trees up 2 acres of land is considered domestic (602-771-8430 ADWR)

Arizona Water Law under Title 45

Arizona State Code (Title 45) 45-402-8²². "Exempt well" means a well having a pump with a maximum capacity of not more than thirty-five gallons per minute which is used to withdraw groundwater pursuant to section 45-454²³.

Regulated ground water use – Exempt well within an active management area pumps less than 35 gpm all other wells in non active management areas not required to report ground water pumping – only notice and licensed well driller.

Wyoming - Domestic²⁴ Water Well up to 3 Dwellings, Livestock, and up to 1 acre for \$50 or \$75 with irrigation²⁵. Permit U.W.5 issued in less than 30 days – Yes recognition of private property right to water for \$50 to \$75 in 30 days or less.

- 21 Strategic Vision for Water Supply Sustainability Arizona Department of Water Resources \$200 Billion GDI, 7 million acre-feet of water used for a population of 6.5 million Utah \$103 Billion GDI, 6 million acre-feet, and 2.7 million population. http://www.azwater.gov/AzDWR/Arizonas_Strategic_Vision/documents/ColoradoRiverBasin_SouthStrategicVisionOutreach1-22-2014.pdf
- 22 Arizona State Code 45-402-8 http://www.azleg.gov/FormatDocument.asp? inDoc=/ars/45/00402.htm&Title=45&DocType=ARS
- 23 Arizona State Code 45-454 Definitions of Exempt Wells (Domestic for \$150 filing fee) http://www.azleg.gov/FormatDocument.asp?inDoc=/ars/45/00454.htm&Title=45&DocType=ARS
- 24 Wyoming State Engineer's Office https://sites.google.com/a/wyo.gov/seo/ 307-777-6150
- 25 Wyoming Domestic Water Permit https://2ce3bd20-a-84cef9ff-s-sites.googlegroups.com/a/wyo.gov/seo/seo-files/UW5_0909.pdf?
 attachauth=ANoY7crbtEMgt7oRQOaMCOOmGTO_h7dWSOMPZBgJBTEYbPs3_AYWvrLcYI3km19oHsPQ67k0Ak
 qioY-EhYRP-6cvn5gipQRdS6Ro3xJuWlu0nIyQAdopqGu8tTrefQ3gEUJrbTEa7prGQLpA36WRLplHbincieHmKdPYIPE4YSWjL5gSEZ_Vujpi5_3wCzoeHMdhGBv2Z24k4vSN_N5DmjsI66k_Byleg%3D
 %3D&attredirects=0

For Domestic includes outside watering house and livestock limited to 25 gallons per minute for up 3 single dwellings or less, noncommecial watering. It takes less than 30 days.

"What the heck!" Response of Wyoming Office of State Engineer employee to Utah's process takes up to 10 years and up to \$200,000.

Wyoming Water Code Title 41

Idaho - Domestic Well Permits²⁶ Expedited Process fax or email \$75 fee instant approval except

Domestic use – residential well home and anything associated can't exceed 13,000 gallons per day and half acre of irrigation²⁷ 4 to 4.5 acre-feet south Idaho north Idaho 3 acre-feet of irrigation.

Well Driller faxes or emails in for start card for well ID tags. Fee is \$75. Valid to drill upon receipt. Instantaneous. In a few critical ground water area permits are granted takes a little longer. Idaho Water Code Title 42 - 111 A and B

California - Domestic Water Use and Livestock up to 10 acre-feet, and small irrigation up to 20 acre-feet. No cost for domestic ground water. \$250 Registration Fee for surface waters – Yes recognition of private property right to water. Immediate or 2 to 6 months if surface.

California Water Code²⁸

California has no permits for ground water permits for small domestic wells²⁹. No State water right required for underground. No time required. Licensed driller required.

If a surface source flowed through property, then a small domestic, small stock pond limited by 10 acre-feet of storage, and small irrigation is 20 acre-feet. Initial fees \$250 plus \$100 renewal fee every 5 years. Time table for registration for small domestic, ponds available everywhere. Small irrigation is limited to North Coast California. Small Domestic protests are ignored by State Water Control Engineer or State Environmental Scientist. Process takes 2-6 months. Each Water Division has about 2 Engineer's and 2 Scientist on 4 Units – Coastal Stream, Inland Stream, Russian River, Napa River Units.

Oregon - Domestic Wells just for the asking³⁰ plus \$225 initial fee and upon completion \$300 fee.

²⁶ Idaho Department of Water Resources http://www.idwr.idaho.gov/

²⁷ Idaho Code 42-111 http://www.legislature.idaho.gov/idstat/Title42/T42CH1SECT42-111.htm

²⁸ California Water Code http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=wat&codebody=&hits=20

²⁹ California Water Code on Small Domestic, Small livestock pond, and Small Irrigation http://www.leginfo.ca.gov/cgi-bin/displaycode?section=wat&group=01001-02000&file=1228-1229.1

³⁰ Oregon Water Resources Department http://www.oregon.gov/OWRD/pages/index.aspx

E-filing for start card for Notice of Intent to Drill is \$225. After well is drilled exempt well fee is \$300. No others fees to the State. Licensed and bonded driller No water right required – exempt well. 15,000 gallons per day limit for single or group houses up to ½ acre of irrigation.

Water Rights and Exempt Uses³¹

Under Oregon law, all water including groundwater is publicly owned. With some exceptions, water users must obtain a permit or water right from the Oregon Water Resources Department (OWRD) to use a well. Some uses, referred to as "exempt uses", are exempt from the water right permitting process. Exempt uses carry the same rights and responsibilities as a certificated water right:

- -Have a priority date as indicated on the well log
- -Water must be used beneficially and without waste
- -Exempt uses are subject to curtailment during periods of shortages in order to protect a senior right.

Following are some common uses exempted from the water right permitting process:

- -Single or group domestic purposes up to 15,000 gallons per day;
- -Stock watering;
- -Watering any lawn or non-commercial garden not exceeding ½ acre in area;
- -Down-hole heat exchangers;
- -Any single industrial or commercial development up to 5,000 gallons per day.
- -Exempted uses are on a per-property or per-development basis. Adding additional wells does not increase an exempt limitation.

(For example, adding a second well does not increase the irrigation exemption to more than ½ acre)

Recording an Exempt Use Well Landowners of property on which a well is drilled for an exempt use purpose are required to provide OWRD, within 30 days after well construction completion, a map locating the well and an ex empt use recording fee. The fee is used to evaluate groundwater supplies, conduct groundwater studies, carry out groundwater monitoring, and process groundwater

³¹ Oregon Water Rights and Exempt Uses - http://www.oregon.gov/owrd/gw/docs/water_well_booklet_2010.pdf

A private property owner can dry farm and use hundreds of acre-feet of water without permit, but let him build a house without a water permit and he's committed a crime equal to a DUI. This is simply wrong. People are more important than plants. Public food providers (farmers) are of equal value to us as public water providers. Food is equal to water in value to us. The treatment of all water users must equalized. If public water suppliers can legally hold water for 40 years then the same right must exist for public food providers. The State has relinquished control of Utah's water to public water suppliers in derogation of the rights of public food providers.

Final Question: How many tax dollars are being lost to education, health care, etc by private property de-valued by Utah's de-watering of private land laws and policies?

For example, if dry piece of private land is worth \$35k, but \$2 million with an Arizona/Nevada/Colorado/California/Wyoming/Idaho styled policy, then Utah's tax funding would \$32,934 annually based on SL County mill rate of .016467 of which \$16,836 goes to education.

There are hundreds of million in private property values waiting for Arizona/Nevada (Western States) styled water laws to be unlocked and taxed for the public good.

Extrapolate the example across Utah, and one can easily see that Utah's non-conservative water laws

and policies are very expensive in terms of dollars lost to education, government as well as the significant loss of and private property rights.

n, value as Public Water Providers. Why don't farmers have the same water privileges as water providers?

Utah Public Food Providers (farmers) are equal in

Issue 3:

The BOR/CUP Federalizing Utah's water -

Q: Why would the BOR/CUP seek to federalize Utah's water and how have they done it?



A: Imagine if you were the newest member (CUP) of the water cartel (SLC, Sandy, Weber Basin, Jordan Valley, Washington Conservation District) with the most junior water rights (most 1965 priority) and you entered in to \$1 Billion worth of water deliver contracts. You would try to know out the senior water rights by making them immobile.

Q: How has the BOR/CUP immobilized Utah's water?

A: By changing the water transfer statutes – Utah Code 73-3-3, by protesting water transfers, by suing

senior water right owners, by using the courts to rule that non-use applications don't protect a water right for past forfeiture issues (CUP v South Utah Valley Municipal Water Association).

Q: Why would the CUP and CUP's water lawyer Steve Clyde move Utah's water laws to the far left by telling Legislators, "The Utah Supreme Court doesn't understand Utah water law. We need to fix Supreme Court rulings like Jensen and Big Ditch"

A: Because immobilizing senior water rights enhances junior federal water rights also promotes SLC's philosophy of restricting water transfers into the canyons for absolute control of development in the canyons. And immobilizing multi-millon dollar water contracts prevents cities who own such contracts from moving their contract water around in the water market place to recoup costs or create value.

Q: What practical steps can be done to reduce the interference of the CUP into Utah water laws?

A: Put the CUP legal professional service provider contract valued at \$500,000+ annually which the Clyde's have held for 53 years out to competitive bid. CUP board members come and go, the the Clyde's (Edward -Grandpa, Steve-Son, and Johnathan-Grandson) have effectively controlled the CUP - \$17 million in water sales. \$50 million in revenues taxing property in 10 counties.



Q: What has happened to Utah's water laws and policies and who has been driving Utah's water laws to the far left (nonrecognition of private property water rights,



immobilizing senior private rights by changing 73-3-3, and granting special privileges to so-called "public water suppliers" in derogation of "public food providers" (farmers) private water rights.

A: The primary driver moving Utah's water to the far left is Salt Lake City and secondarily BOR/CUP.

Q: Why has Salt Lake City directly and indirectly filed over 17,000 water protests, and sued over 2,500 parties over water?

A: To make money from their residents and "surplus" water customers (\$24 million in annual sales in three counties (Summitt, Wasatch, and Salt Lake County), and to de-value the 25,000 acres of private canyon lands in SLC's 7 favorite Wasatch Canyons (City Creek Canyon, Emigration Creek Canyon, Parley's Creek Canyon, Red Butte Creek Canyon, Big Cottonwood Creek Canyon, Millcreek Canyon, Little Cottonwood Canyon).

Q: How much money is Salt Lake City taking from the private canyon land owners?

A: Over \$250 million if the 25,000 acres are valued at \$10,000 an acre.

Q: Why has the State Water allowed Salt Lake City to use water to take land without just compensation?

A: Salt Lake City has 12 water lawyers, a \$125 million annual utility budget, and holds 500,000 acre-

feet of Utah water while need only 50,000 for SLC and another 25,000 acre-feet for SLC's "surplus" business. The Division of Water Rights has 3 lawyers, and a \$9 million annual budget. The CUP has a \$50 million dollar budget.

Q: Of Utah 243 municipalities, how many operate "surplus" water business like SLC under Utah Code 10-8-14?

A: None

Q: What would happened to Cottonwood Heights water bills if the State Legislature granted titled to "surplus" water to Cottonwood Heights?

A: 30,000 water bills would be cut in half. Alta would not be controlled by SLC. Jordanelle Special Service District would save \$400,000 annually. Park City would also save money.

Q: Have all the water rights in Utah been audited by the Division of Water Rights?

A: All except Salt Lake City's

Q: How has Salt Lake City managed to hoard 500,000 acre-feet of Utah's water and not be audited?

A: Cronyism – Senator Mike Lee, "Just as the real victim of the baseball steroids scandal was the marginal player who never got a fair chance because he didn't cheat, the true victims of crony capitalism are the true capitalists; honest entrepreneurs, employees, consumers and investors who are today unfairly forced to play uphill in a rigged game." ³²

Q: What does it mean when one says, "Utah's water is being Federalized?"

A: Federal water rights are junior rights most 1965 priority or later. Senior water rights are private water rights. The CUP/SLC have for decades made the water transfer process time, money, and energy consuming to the point where the Director of Salt Lake City Public Utilities and Steve Clye (CUP water lawyer and SLC water lawyer) are the defacto State Engineer.

Q: If an owner of a senior water right seeks a water transfer protested by SLC, CUP, BOR and their water friends, how likely is the applicant doing to stand up to Billion dollar water juggernauts over 5 years of litigation to transfer his water to sell it for market value?

A: State law states one can seek water transfers. The law of the water jungle says you can't which the State Engineer knows because the transfer process has gamed for so long its like a long standing joke.

When Putin uses a basic utility to enforce his politics, we collectively cringe at the raw brutality of it. When a Polygamist Sect Leader cuts a man's water line to enforce his religions system on other we cringe. When the Salt Lake City Public Utilities Directors arbitrary and capriciously cuts a man's water line devaluing a \$2 million dollar lots to \$35,000 so a "charitable" land conservation foundation he sits on is benefit, we wonder what is the difference between the treatment of Ukaine land owners by Putin and Alta owners by SLC?

³² Mike Lee: Uniting against cronyism and restoring equal opportunity for all http://www.deseretnews.com/article/865602249/Mike-Lee-Uniting-against-cronyism-and-restoring-equal-opportunity-for-all.html?pg=all

When the LDS Church, Walmart, Micron, Utah Home Builders are shaken down for millions in private water rights/shares we must improve the administration of Utah's water. We don't need new laws. We need water administrators who are not apathetic to the adverse economic impacts of their decisions.

Let us consider the private property right positions of Utah's sister Western States, the way in which outside corporations view Utah's water policies, and the Federalizing of Utah's water.

Arizona knows how to manage water well. Consider some of their forward thinking success strategies enacted in 1980 -See attached pdf "Arizona's Historical Success in Water Management"

Q: How does Arizona have a \$200 Billion GDP, use only 7 million acre-feet of water for a population of 6.5 million compared to Utah with a \$103 Billion GDP, using 6 million acre-feet of water for a population of 2.8 million?

A: In 1980 Arizona passed sweeping water reform legislation and efficient water policies.

Q: What is a major difference in water management styles between Arizona and Utah?

A: Arizona recognizes more conservative private property rights and the benefit of small amounts of private domestic water state wide in AMA and non-AMA areas without buying a water right unlike Utah. Utah does not grant its private property owners similar rights water as Arizona.

Note: No well permits are required in Non-Actively Managed Area's. Domestic permits are granted all acres including actively managed areas. An Actively Managed Area in Arizona is like a basin closed to new appropriations in Utah. In Arizona all private land can have domestic well permits for \$150 or less if there are no culinary water lines in the area. Utah does not recognize that conservative Republican private property right like Arizona does.

Arizona has a more arid climate than Utah. Arizona has double the population, double the economy of Utah. Oddly, Arizona uses about the same amount of water as Utah.

Arizona strikes a better balance between private property rights to small amounts of domestic water than Utah and the benefits are evident is Arizona's water efficiencies and private property rights.

Perhaps having the Arizona State Engineer come and speak to the Utah Legislature in a work session would be informative on appropriate changes for Utah's water laws and policies.

Better data and better data points on the Utah Division of Water Rights means better water conservation.

Upgrades for "Utah Water Use Data Form" Report to Division of Water Rights -

1-Culinary water delivery totals by month

2-Complete and comprehensive water accounting with inventories on spreadsheets – all water rights, water shares, water contracts, diligence claims, applications to appropriated approved, unapproved, non-use applications approved and unapproved, water held by Metropolitan Water Districts or

subsidiaries with totalized data points

For example, Salt Lake City

- 1-600 water right number with amount of water represented by each water right
- 2-Change application numbers with amount of water represented by each change application.
- 3-Non-use application numbers with amount of water held in non-use
- 4-Total number of water shares with break down SLC had 55,567.473 water shares in 2003 but today shows about 15,514.723
- "A fairly easy way to understand the difference between diversions and consumptive use is to visualize water use at a typical home. Indoor water use only consumes 5 percent of the metered water. The remaining 95 percent runs down the drains and is treated, then is returned [return flow] back to the natural system." 33

This means the average house buying 173 gallons of water metered water, returns 164.35 gallons back to nature and evaporates (depletes/consumes) 8.65 gallons.

A house depletes/consumes about 8.65 gallons of water per day (5% of inside water is depleted -95% returns to the drainage basin)³⁴. 164.35 of the 173 gallons used by an average house returns to the water basin.³⁵

Bureau of Reclamation BOR(USA)/CUP are Federalizing Utah's water. SLC pressures State Water Administrators not to Update and Modernize Utah's Domestic and residential Irrigation Duties, because SLC uses water as a "land planning tool" to de-value 25,000 private canyon acres in "their canyons" (a \$250 million taking) and for the absolute control of land in the Wasatch Front Canyons.

Water Issue 4: Water Conservation dollars

Public Community Systems Water Use (2005 data)

Category	Gallons Per Capita Use (gpcd)	Total Use (acre-feet per year)
Residential	182 gpcd	509000
Commercial	37 gpcd	97000
Institutional	30 gpcd	85000

^{33 2009} Residential Water Use – Survey Results and Analysis of Residential Water Use For Seventeen Communities in Utah November 3, 2010 Utah Division of Water Resources Report prepared by Todd Adams, Assistant Director of the Utah Division of Water Resources and endorsed by Dennis J. Strong, Director of Water Resources. http://water.utah.gov/Reports/RWU_Study.pdf

³⁴ Same as footnote 12 above

³⁵ Identifying Residential Water User Survey Results and Analysis of Residential Water Use for Thirteen Communities in Utah January 2, 2001 http://www.water.utah.gov/M&I/PDF/Residential%20Final1.pdf under the direction of D. Larry Anderson director of Utah Division of Water Resources, and supervised by Lloyd H. Austin, chief of Resource Inventories and Special Studies Section.

Industrial	11 gpcd	26000
Total	260 gpcd	717000
Colorado River Compact and Treaty Apportionment Based on Current Hydrology 15.0 MAFY		1,369, 000

The standard report that is most often used to compare water use of various states is the United States Geological Survey's (USGS) Estimated Use of Water in the United States. This report evaluates water use every five years³⁶

It's reasonable to say, Utah uses about 1 million acre-feet (325,851,000,000,000 gallons) or 325 Trillion gallons. Utah's farmers use 5 times that amount or about 5 million acre-feet.

Converting 2 million acre-feet of farmer flood irrigation to sprinkler irrigation would conserve 1 million acre-feet of water or enough for a pollution of 6 million in Utah with no increase of water use.

Con - Some say sprinklers are bad for the environment, because it doubles the salinity of the return flow.

Q: Is it more cost effective to use Utah's water dollars to pay for sprinklers to replace flood irrigation than to buy expensive water projects?

A: That's a good question.

Q: Are underground drip grids a better way to water than above ground sprinklers?

Jordanelle cost \$1.2 Billion to impound 340,000 acre-feet at cost of \$3,500 per acre-foot. Jordanelle cost per acre-foot today may be \$6,000 to \$7,000.

In 2008, cost per acre to convert to from flood to sprinkler was \$1,223 per acre of land which translated into 2 acre-feet of water. That's \$611.50 to conserve 1 acre-foot of water.

??1995 Jordanelle Damn costs \$3,500 per acre-foot versus 2008 Water Conservation costs of \$600 per acre-foot for farm sprinklers.

Jordanelle surface area 3,300 acres with full capacity of 360,500 acre-feet.³⁷

³⁶ Municipal and Industrial Water Use in Utah "Why do we use so much water, when we live in a desert? December 29, 2010

³⁷ Jordanelle Reservoir http://www.waterquality.utah.gov/watersheds/lakes/JORDANEL.pdf

Water Conservation versus Water Lawsuits – No lawsuit solution water exchange by conservation

	Nevada	Utah
Category 1- Allocated	12,000 acre-feet	55,000 acre-feet
Category 2-Unallocated	36,000 acre-feet	5,000 acre-feet
Category 3-Reserved	18,000 acre-feet	6,000 acre-feet
Total Water at Issue	66,000 acre-feet	66,000 acre-feet

The BLM- Bundy dispute is artificial. Senator Harry Reid's son's client Chinese Solar company needs a turtle mitigation area. BLM could designated Bundyville as a hybrid Turtle-Cattle combination hybrid area. The Chinese get to use BLM land for a solar farm. The turns from the Chinese solar farm are relocated to Bundyville. The turtles eat the cattle manure. The 53 cattle operations could have just stayed in the area. Instead, a "regulation" was created which dictated turtles and cattle could not cohabitate though both did prior to the creation fo BLM and the US government.



Misc:

Water Privatization – 17 million people in US get water from .

2,000 people die a day from water borne illnesses.

97% of sewer water is government treated -3% of sewer is private treated.

Trash-Talking Garbage disposals -

Ban Garbage Disposals – Garbage Disposals increase water use, increase power use, increase water treatment costs. A sewer is not a garbage can. Waste put down the sink is waste collected at the sewer treatment plant.³⁸

 $\underline{http://www.kingcounty.gov/environment/wtd/Education/ThingsYouCanDo/UseLessWater/Garbagedisposals.aspx}$

³⁸ King County, Washington

³⁹ Is my In-Sink Garbage Disposal Eco-Friendly? http://www.treehugger.com/kitchen-design/is-my-in-sink-garbage-disposal-eco-friendly.html Pablo Paster February 23, 2009

Use a garbage disposal sparingly to minimize energy and water use.

Garbage disposals connect to the sewer system and food waste will eventually get recycled through the wastewater treatment plants as biosolids soil amendment.

However, running a garbage disposal requires water and electricity, after the food goes down the drain even more water and electricity will be used to move the water and clean the food out and truck it to farms and forests.

Water Issue 5: Colorado River Compact — Utah's 1.7 million acre-feet allotment

Q: Could Utah really make hundred of millions for education with changes to the Colorado River Compact?

The mobility or transferability of water game is played by the Lower Basin States (California, Arizonia, and Nevada) against the Upper Basin States (Colorado, Utah, Wyoming, New Mexico, and Arizona). If Upper Basin States can't or don't use their water, the Lower Basin States use Upper Basin States' water for free. There is effectively no provision to lease un-used water even on a temporary basis.

"The Colorado River Compact is a 1922 agreement among seven <u>U.S. states</u> in the <u>basin</u> of the <u>Colorado River</u> in the <u>American Southwest</u> governing the <u>allocation</u> of the <u>water rights</u> to the <u>river</u>'s <u>water</u> among the parties of the <u>interstate compact</u>. The agreement was signed at a meeting at Bishop's Lodge, near <u>Santa Fe, New Mexico</u>, by representatives of the seven states the Colorado river and its tributaries pass through on the way to Mexico."

Provisions

The compact divides the river basin into two areas, the Upper Division (comprising Colorado, New Mexico, Utah and Wyoming) and the Lower Division (Nevada, Arizona and California). The compact requires the Upper Basin states not to deplete the flow of the river below 7,500,000 acre feet (9.3 km³) during any period of ten consecutive years. Based on rainfall patterns observed in the years before the treaty's signing in 1922, the amount specified in the compact was assumed to allow a roughly equal division of water between the two regions. The states within each basin were required to divide their 7,500,000-acre (30,000 km²) foot per year (289 m³/s) share allotment among themselves. The compact enabled the widespread irrigation of the Southwest, as well as the subsequent development of state and federal water works projects under the United States Bureau of Reclamation. Such projects included

⁴⁰ Colorado River Compact http://en.wikipedia.org/wiki/Colorado River Compact

the Hoover Dam and Lake Powell.

The current specific annual allotments in the Lower Basin were established in 1928 as part of the Boulder Canyon Project, while the current specific annual allotments in the Upper Basin were established by the Upper Colorado River Basin Compact of 1948.[2] They are:

Upper Basin, 7.5 million acre-ft/year (293 m³/s) total

Colorado 51.75%* 3.86 million acre·ft/year (150.7 m³/s)
Utah 23.00%* 1.71 million acre·ft/year (67.0 m³/s)
Wyoming 14.00%* 1.04 million acre·ft/year (40.8 m³/s)
New Mexico 11.25%* 0.84 million acre·ft/year (32.8 m³/s)
Arizona 0.70% 0.05 million acre·ft/year (2.0 m³/s)

*Percentages with a star are a percentage of the total *after* Arizona's 0.05 million are deducted. Arizona's percentage is of the total.

Lower Basin, 7.5 million acre ft/year (293 m³/s) total

California 58.70% 4.40 million acre·ft/year (172 m³/s) Arizona 37.30% 2.80 million acre·ft/year (109 m³/s) Nevada 4.00% 0.30 million acre·ft/year (12 m³/s)

In addition to this, 1,500,000-acre-foot $(1.9 \times 10^9 \text{ m}^3)$ /year of Colorado River water is allocated to Mexico, pursuant to the treaty relating to the use of waters of the Colorado and <u>Tijuana rivers</u> and of the <u>Rio Grande</u>, signed February 3, 1944, and its supplementary protocol signed November 14, 1944. Also, the lower basin can get an additional 1,100,000-acre-foot $(1.4 \times 10^9 \text{ m}^3)$ /year in surplus conditions.[2]

Utahwater news 801

Disclaimer: This is a draft of opinions. Water data is a moving target. Water Data is not transparent, so there are errors. You can google most of this data in this article for verification.

End Notes – Credits - News Articles on water issues -

1-Saratoga Springs to buy \$62M of water for LDS Church

"SARATOGA SPRINGS -- In an emergency meeting on Friday, Saratoga Springs council members voted unanimously to purchase \$62 million-worth of federal water for The Church of Jesus Christ of Latter-day Saints.

As part of the agreement, the city also agreed to annex nearly 3,000 acres of church farmland and will compel some smaller landowners to join the annexation. The water will allow the business arm of the church to develop its land, plus as much as several thousand more acres in the area, building up to

20,000 homes, nearly quadrupling the city's population"

The deal, which gives the church 10,000 acre-feet of water, is unusual on several fronts."

September 19, 2009 12:00 am • <u>Caleb Warnock - Daily Herald</u> (0) <u>Comments</u>

2-Water rulings show Utah not worthy of making its own choices — Salt Lake Tribune

"Anybody who thinks it would be a good idea for the state of Utah to be able to make its own land use, water use and environmental decisions, without meddlesome federal bureaucrats getting involved, should be working to demonstrate that the decisions that would be made here would be at least as wise and measured as anything that would come from a Washington functionary." December 2, 2013

Salt Lake Tribune pro-Federalizing Utah's water.

3-Jury sides with family in polygamist sect lawsuit

Print Email
March 21, 2014 10:04 am • Associated Press
(4) Comments

SALT LAKE CITY — An Arizona jury has agreed that a polygamous sect on the Utah-Arizona border discriminated against a family that doesn't belong to the church and has awarded them \$5.2 million.

The Salt Lake Tribune reports (http://bit.ly/NA6nrk) a jury in Phoenix's U.S. District Court on Thursday sided with prosecutors who argue the family was denied a household water connection for religious reasons.

Ronald Cooke says he and his family were discriminated against when they returned in 2008 to his boyhood town of Short Creek — a collective name for Hildale, Utah, and Colorado City, Ariz.

Lawyers for the towns argued the family was denied utilities because they did not fill out paperwork correctly.

They say they're considering appealing the jury's decision.

4-Utah city ordered to release NSA center water usage numbers

Published March 21, 2014 Associated Press Facebook39 Twitter110 Gplus1



FILE: June 6, 2013: An aerial view of the NSA's Utah Data Center in Bluffdale, Utah.AP

SALT LAKE CITY – A state panel has ordered that information detailing how much water the NSA Utah Data Center uses be given to the Salt Lake Tribune.

The committee enforcing the state's open-records law on Wednesday voted 5-0 to order the city of Bluffdale to release the documents.

Bluffdale sells water to the National Security Agency's data center on the southern border of the city. It had earlier denied a records request from the newspaper after officials argued releasing the documents could threaten the site's security.

<u>The Salt Lake Tribune</u> reports the warehouse is thought to include troves of data collected under NSA surveillance.

Other government records indicate the massive center uses over 1 million gallons of water per day to cool its computer systems.

5-Fight over Alta water heads to court Salt Lake Tribune February 10, 2014

"In separate suits, Salt Lake City and <u>Friends of Alta</u>, a <u>land trust</u>, say applications to transfer water rights to two parcels in Albion Basin, owned by Kevin Tolton and Judith Maack, failed to meet basic requirements because they interfere with existing water users.

At stake is a precedent that could pave the way for homes to rise in the canyon's scenic head — under Devil's Castle and Catherine's Pass — that harbors the upper half of Alta Ski Area.

Jones says his office is not a tool for land-use policy but rather is obligated to comply with state statutes geared toward ensuring public waters are available for "beneficial use."

6-Steve Young wants water, but SLC isn't sharing Salt Lake

Tribune Article April 1, 2011

"It's unfair. Salt Lake City is giving water to people at Snowbird," he said, noting that the town of Alta is "dead set against development."

But the senior Young conceded that the battle isn't new. "It's been going on for 25 years."

Alta Town Administrator John Guldner admitted that Alta doesn't want more development in Albion Basin. But, he added, "Salt Lake City owns the water rights, and it holds all the cards."

Alta incorporated in 1970 and penned a water contract with Salt Lake City in 1975.

The following year, Alta annexed the Cecret Lake area. That annexation agreement provides for police, fire and sewer services, Guldner said. But not water."

7-Alta Town Council members criticized as 'nonresidents'

Deseret News December 16, 2005

"If one man gets his way, three members of the Alta Town Council will get the boot.

That man, Mark Haik, has complained to the attorney general and Salt Lake County district attorney that those three council members do not live in Alta. They split their time between apartments or second homes in Alta and houses in the Salt Lake Valley, Haik said in his complaint earlier this month."

8-'People should vote where they live,' says lawsuit filer in Alta dispute Salt Lake Tribune February 11, 2012

Home is where the heart is.

Or, maybe not. A case pending in 3rd District Court could change that.

Alta resident Guy Jordan is claiming that Alta Town Councilman Steven "Piney" Gilman is not really a resident of the tiny town. It is the first judicial challenge under a statute passed in 2010 that allows Utahns to appeal a county clerk's decision on voter eligibility. The outcome may set legal precedent for residency qualifications of those seeking to vote and to hold elective office in Alta and elsewhere.

The dispute has sparked a fierce buzz among the 215 registered voters in the town that abuts the famed ski resort.

"People should vote where they live. There is no reason that Alta should be an exception," Jordan said in an interview." (Mayor Pollard elected with 62 votes for 2014)

9-Estate sues Alta over plan for homes Deseret News December 19, 2009

ALTA — The estate of one-time town councilwoman and well-known environmental activist Jody Shrontz has sued this tiny ski town over its denial of a subdivision near Albion Basin in Little Cottonwood Canyon.

The lawsuit was filed in 3rd District Court on Dec. 11, just in time to meet appeal requirements. Salt Lake City also is listed as a defendant in the documents.

The Alta Town Council unanimously voted in November to deny an application for 10 new homes near the Grizzly Gulch neighborhood. The elected officials cited a lack of fire and water access for the

project, among other things.

(After 8 years of exhaustive litigation over 10 water connections, SLC and Alta settled with the Shrontz Estate. SLC got \$400,000 for legal fee. Alta got \$100,000 for legal fees. The Shrontz Estate got the 10 connections they always had, but which were disputed so the Shrontz Estate could offer a deal sweetener, or other bone to SLC/Alta.

Water is being misused to shake developers down for cash and donations.

10-Amended Order of the State Engineer – 57-7800 (a28548)

After a decade, the application was approved due to protests, litigation, etc.. This decision for water for a seasonal cabin was appealed to the Third District Court in the form of a lawsuit SLC v Utah State Engineer, Tolton et al

"Permanent Change Application Number 57-7800 (a28548), in the name of Kevin Tolton, was filed on December 18, 2003, to change the points of diversion, place of use, and uses of 0.0104 cubic foot per second (cfs) or 0.9033 acre-foot (af) of water as evidenced by Water Right Number 57-7800."

"The State Engineer supports efforts to maintain and improve watersheds and preserve the quality of the public waters. However, limiting access to water as a land planning tool wold usually conflict with the fundamental public policy the State Engineer implements – making public waters available for beneficial use."

Private Wells for Home Use – Colorado State University Extension⁴¹ -

"How do I get a well permit for my property?

Contact the Office of the State Engineer to apply for a permit. Forms are available online at http://water.state.co.us/pubs/wellforms.asp. In most cases, a licensed water well driller will help you fill out and submit the required paperwork. Once the form is completed and construction reports are filed with the State Engineer, most well permits are good for the life of the well and do not need to be renewed.

What is the difference between "exempt" and "non-exempt" wells?

In simple terms, exempt wells *do not* require an augmentation plan, while most non-exempt wells do require an augmentation plan.

Most homeowner wells in Colorado are exempt. Exempt wells are not administered under the "first in time, first in right" priority system used to allocate water in our state. Exempt wells are generally limited to 15 gpm and require non-evaporative wastewater systems such as septic tanks and leach fields. It is generally presumed that these non-evaporative wastewater systems consume about 10 percent of the total water pumped. The rest of the water is returned to the hydrologic system via percolation back to the ground water.

⁴¹ Private Wells for Home Use by E. Marx, R. Waskom and D. Wolfe (12/13 http://www.ext.colostate.edu/pubs/natres/06700.html

Are there different types of exempt wells?

Yes. The two most common types of exempt wells for homeowners are *Household-Use Only Wells* and *Domestic and Livestock Wells*.

Household-Use Only Wells: Most private wells drilled on or after May 8, 1972 on properties less than 35 acres are permitted for exempt household-use only. Water can be used only inside the home. Water cannot be used to irrigate lawns, gardens, windbreaks, livestock, or any other outside use.

Domestic and Livestock Wells: If you own property that is 35 acres or larger, you can usually get a domestic and livestock well. Only one of these wells is allowed per parcel. The well may serve up to three single-family dwellings, irrigate one acre or less of lawn and garden, and provide water for domestic animals and livestock

Water use from exempt, residential wells within designated ground water basins, the Denver Basin, and limited areas on the Western Slope, may be less restrictive than indicated above."

California Water Code for "Small domestic use"

CALIFORNIA WATER CODE SECTION 1228-1229.1

- 1228. This article shall be known and may be cited as the Water Rights Permitting Reform Act of 1988.
- 1228.1. (a) The Legislature finds and declares that it is in the public interest to provide a timely, efficient, and economic procedure for the acquisition of rights to appropriate water for a small domestic use, including incidental stock watering and irrigation uses, a small irrigation use, and for a livestock stockpond subject to prior rights.
 - (b) As used in this article:
- (1) "Small domestic use" means a domestic use, as that use is defined by board rule, or a use for aesthetic, fire protection, recreational, or fish and wildlife purposes that is associated with a dwelling or other facility for human occupation, that does not exceed direct diversion of 4,500 gallons per day or diversion to storage of 10 acre-feet per annum.
 - (2) "Small irrigation use" means either of the following:
- (A) An irrigation use, heat control use, or frost protection use, not to exceed diversion to storage of 20 acre-feet per annum, including impoundment for incidental aesthetic, fire protection, recreational, or fish and wildlife purposes.
- (B) An irrigation use not to exceed direct diversion of 42,000 gallons per day, up to a maximum of 20 acre-feet per annum.
- (3) "Livestock stockpond" means a water impoundment structure constructed for livestock watering use not to exceed direct diversion of 4,500 gallons per day, or diversion to storage of 10 acre-feet per year, as that use is defined by the board, and including impoundment for incidental aesthetic, recreational, or fish and wildlife purposes.
- 1228.2. (a) (1) Subject to subdivision (b), any person may obtain a right to appropriate water for a small domestic, small irrigation, or livestock stockpond use upon first registering the use with the

board and thereafter applying the water to reasonable and beneficial use with due diligence.

- (2) With regard to an appropriation for small domestic use, a registration shall not be filed for a facility served by or used pursuant to a permit or license for domestic or municipal use, and not more than one small domestic use registration shall be in effect at any time for any facility.
- (3) With regard to an appropriation for small irrigation use, more than one registration may be in effect at any time for a registrant if the diversion or storage facilities subject to registration for a registrant do not exceed the ratio of one per 20 irrigated acres, and if the total water use on all acreage covered by the registrations, including any water use based on other rights, does not exceed 100 acre-feet per annum.
- (4) A small domestic use registration and a small irrigation use registration may be in effect for the same facility only if the total combined water use covered by the registrations does not exceed 20 acre-feet per annum.
- (5) With regard to an appropriation for livestock stockpond use, more than one registration may be in effect at any time for a registrant if stockponds subject to registration for that registrant do not exceed the ratio of one per 50 acres.
- (b) Initiation of rights to appropriate water pursuant to this article shall be subject to Article 1.3 (commencing with Section 1205), relating to fully appropriated stream systems. The board shall not accept any registration of water use which proposes as a source of water supply any stream system which has been unconditionally declared by the board to be fully appropriated pursuant to Section 1205, except that subdivision (b) of Section 1206, relating to conditional declarations of fully appropriated stream systems, shall apply to registration of water use pursuant to this article, and the board shall accept those registrations where consistent with the conditions specified in any such declaration.
- (c) On or before June 30, 1989, and annually thereafter, the Division of Water Rights shall prepare and post on its Internet Web site information summarizing the location, nature, and amount of water appropriated pursuant to this article. The information shall include a description of the availability of unappropriated water in those stream systems which may become fully appropriated within the next reporting period.
- (d) If a registration is filed with a source of supply on a stream system that the most recent report submitted under subdivision (c) identifies as a stream system that may become fully appropriated within the next reporting period, the registration shall not take effect unless the board finds that unappropriated water is available for the appropriation proposed by the registration. If the board finds that unappropriated water is not available to supply the proposed appropriation, the board shall, following notice and hearing, determine whether that stream system should be declared fully appropriated pursuant to Article 1.3 (commencing with Section 1205).
- 1228.3. (a) Registration of water use pursuant to this article shall be made upon a form prescribed by the board. The registration form shall set forth all of the following:
 - (1) The name and post office address of the registrant.
 - (2) The source of water supply.
 - (3) The nature and amount of the proposed use.

- (4) The proposed place of diversion.
- (5) The place where it is intended to use the water.
- (6) The time for completion of construction of diversion works and for complete application of the water to the proposed use.
- (7) A certification that the registrant has contacted a representative of the Department of Fish and Game designated by that department for that purpose, has provided information to that department that is set forth in the registration form, and has agreed to comply with all lawful conditions, including, but not limited to, conditions upon the construction and operation of diversion works, required by the Department of Fish and Game. The certification shall include a copy of any conditions required by the Department of Fish and Game pursuant to this paragraph.
- (8) Any other information that may reasonably be required by the board.
- (b) Registration of water use shall be deemed completed on the date that the form, executed in substantial compliance with the requirements of this section, and the registration fee specified in Section 1525 are received by the board.
- (c) The board shall issue monthly a list of registrations filed under this article during the preceding calendar month. This list shall contain the information required by paragraphs (1) to (6), inclusive, of subdivision (a). The list shall set forth a date prior to which any interested person may file a written protest in opposition to the approval of a stockpond registration. That date shall be not later than 30 days from the date on which the list is issued. The board shall mail the monthly list of registrations filed to any person who so requests.
- (d) Prior to the date set forth on the list required under subdivision (c), any interested person may file with the board a written protest in opposition to the approval of a stockpond registration. The protest shall clearly set forth the protestant's objections to the registered use based on interference with prior rights. The protest shall be served on the registrant by the protestant by mailing a duplicate copy of the protest to the registrant, or through service undertaken in another manner determined to be adequate by the board. The procedures set forth in Article 1.5 (commencing with Section 1345) of Chapter 5 shall be used for reviewing a protested registration.
- 1228.4. (a) Any completed registration of water use gives to the registrant a priority of right as of the date of completed registration to take and use the amount of water ultimately applied with due diligence to reasonable and beneficial use thereunder, which amount shall not exceed the amount of proposed use as shown on the registration form.
- (b) Any right obtained pursuant to this article shall remain in effect unless and until any of the following occur:
- (1) The right is forfeited for nonuse pursuant to Section 1241, or abandoned.
- (2) The right is revoked because the registrant knowingly made any false statement, or knowingly concealed any material fact, in the registration.
- (3) The right is revoked for failure to renew the registration as provided in this article.
- (4) The right is revoked pursuant to subdivision (c) of Section 1228.6.

- 1228.5. (a) Registration of a small domestic, small irrigation, or livestock stockpond use pursuant to this article shall be renewed prior to the expiration of each five-year period following completed registration.
- (b) Renewal of registration shall be made upon a form prescribed by the board and shall contain a report of water use made pursuant to the registration as may be required by the board.
- (c) The conditions established by the board pursuant to Section 1228.6 that are in effect at the time of renewal of registration shall supersede the conditions that were applicable to the original completed registration.
- (d) Failure to renew registration in substantial compliance with the reporting requirements prescribed by the board within the time period specified in subdivision (a), or to pay the renewal fee specified in Section 1525, shall result by operation of law in the revocation of any right acquired pursuant to this article.
- 1228.6. (a) The board shall establish, and may from time to time revise, reasonable general conditions to which all appropriations made pursuant to this article shall be subject. The conditions shall include, but shall not be limited to, the following:
 - (1) The appropriation is subject to prior rights.
- (2) All conditions lawfully required by the Department of Fish and Game are conditions upon the appropriations.
- (3) Diversion works shall be constructed and water applied to beneficial use with due diligence.
- (4) Registration shall be renewed and water use reported pursuant to law and to the rules of the board.
- (b) Immediately upon registration pursuant to Section 1228.3, renewal of registration pursuant to Section 1228.5, or amended registration pursuant to Section 1228.7, the board shall provide the registrant with a written document setting forth the conditions required by this section, and the perfection and exercise of rights acquired pursuant to this article shall at all times be subject to those conditions.
- (c) The conditions required by this section shall be deemed "terms and conditions" within the meaning of Section 1825 and the expression of legislative intent contained in that section shall be applicable thereto. The authority of the board to enforce the terms and conditions of permits and licenses to appropriate water, and to prevent the unlawful diversion of water, including, but not limited to, provisions regarding cease and desist orders and the revocation of permits and licenses, shall be applicable to appropriations initiated or perfected pursuant to this article.
- 1228.7. (a) A registrant may change the point of diversion or place of use by delivering to the board an amended registration form in accordance with Section 1228.3, including payment of the registration fee specified in Section 1525, except that the purpose of the use shall not be changed and the change shall not operate to the injury of any legal user of the water involved.
- (b) A completed amended registration of water use continues in effect the priority of right as of the date of the original completed registration.

- (c) All provisions of this article regarding appropriations made pursuant thereto, including, but not limited to, provisions regarding enforcement, are applicable to the appropriation as described in the completed amended registration, except that the conditions established by the board pursuant to Section 1228.6 that are in effect at the time of completion of the amended registration shall supersede the conditions that were applicable to the original completed registration.
- 1229. (a) The board is not required to adopt general conditions for small irrigation use pursuant to subdivision (a) of Section 1228.6 until the board determines that funds are available for that purpose.
- (b) A registration for small irrigation use pursuant to this article is not authorized until the board establishes general conditions for small irrigation use pursuant to subdivision (a) of Section 1228.6 to protect instream beneficial uses.
- (c) The board may establish general conditions for some methods of diversion or categories of small irrigation use before establishing general conditions for other methods or categories, in which case a registration for small irrigation use is authorized only for those methods or categories for which the board has established the general conditions for the protection of instream beneficial uses.
- (d) The board, prior to adopting other general conditions for small irrigation use, and no later than June 30, 2012, shall adopt general conditions for registration of small irrigation use for facilities used for frost protection in the area described in paragraph (1) of subdivision (a) of Section 1259.4, unless the board determines that sufficient funds are not available for that purpose.
- 1229.1. (a) This article does not apply to those stream segments for which the Director of Fish and Game establishes proposed streamflow requirements pursuant to Section 10002 of the Public Resources Code, notwithstanding the July 1, 1989, deadline for preparation of the requirements.
- (b) Notwithstanding subdivision (a), this article applies to any registration filed before the Director of Fish and Game establishes proposed streamflow requirements for the source of water supply for the registration. The conditions for renewal under subdivision (c) of Section 1228.5 may include any conditions the Department of Fish and Game determines to be necessary to protect stream-related fish and wildlife resources on any source of water supply for which the Director of Fish and Game has established proposed streamflow requirements pursuant to Section 10002 of the Public Resources Code.

"Fill Your Plate" "Agriculture in the Classroom" Photos - Courtesy of Arizona Farm Bureau

Image credit: boettcher / 123RF
Stock Photo Cabin Photo Credit

2 soda fountains with water
4 drinking fountains
4 urinals
51 sinks wells
25 facets
15 toilets

4 urinals

1 soda water

4 drinking fountains

Butcher Spring

Image credit: glopphy / 123RF Stock
Photo

Federal Government Water Holdings (partial list):

Bur	reau of Land Management, Existing Underground Well	01-1182	APPL	APP
A78	8872			
	Priority Date: 06/22/2010	4.0000	acft	
Bur	reau of Land Management, Underground Water Well	13-3825	APPL	CERT
A75	5694			
	Priority Date: 02/18/2005	0.4500	acft	
Bur	reau of Land Management, Pole Canyon Spring	63-2787	APPL	
A77	7880	0 100	-	
	Priority Date:	0.100	cfs	
Bur	reau of Land Management, Underground Water Well	71-1966	UGWC	
U17	7934	44 0000	G. 4	0 05 5
ELU	Priority Date: / /1926 U`s	11.2280	acit 1.	0 AF 35.7
	reau of Land Management, Underground Water Wells (4) Priority Date: 02/25/2008 .7 ELU`s (from WR# 71-1966)	<u>a34058</u> 22.4560	acft 1.	APP 0 AF.,
Bur	reau of Land Management, Underground Water Well (existing)	09-2317	APPL	APP
A78	8375			
	Priority Date: 02/17/2009	0.6180	acft	
Bur	reau of Land Management, Underground Water Well (existing)	09-2339	APPL	APP
A78	8830			
	Priority Date: 05/03/2010	1.9764	acft	
Bur	reau of Land Management, Underground Water Well	15-4958	APPL	7. DD
A77	7946	15 1550	71111	711 1
	Priority Date: 05/01/2008	4.7300	acft	
Bur	reau of Land Management,			
	Unnamed Intermittent Stream Priority Date: / /1876	95-2954	PAC	
	1110110y Date. , , 10,0			
Bur	reau of Land Management,	10.00		

19-20 APPL CERT

A29378 7103 Priority Date: 04/22/1959 0.002 cfs (undivided) Bureau of Land Management, Trap Spring 49-2355 APPL APP A79338 Priority Date: 04/12/2012 4.7300 acft Bureau of Land Management, 49-2356 APPL APP Lost Spring A79339 Priority Date: 04/12/2012 4.7300 acft Bureau of Land Management, Underground Water Wells (2) 89-1159 APPL CERT A44751 9960 Priority Date: 03/04/1975 1.5200 acft Bureau of Land Managment, Underground Water Well (existing) <u>16-886</u> APPL REJ A77945 Priority Date: 05/01/2008 10.0000 acft Bureau of Land Manangement, Unnamed Intermittent Spring 95-2269 PAC Priority Date: / /1876 Bureau of Reclamation, Deer Creek Reservoir and Main Creek <u>t36462</u> LAP Priority Date: 04/22/2010 22.0000 acft Bureau of Reclamation, Underground Water Well a30140 LAP Priority Date: 04/29/2005 0.7500 acft Bureau of Reclamation, United States of America 31-3945 APPL WUC Underground Drain A39228 Priority Date: 02/17/1969 0.100 cfs 26.0000 acft 214.83 supplemental acres in Sec. 26 Bureau of Reclamation, United States of America Underground Water Well 51-6960 APPL CERT A16738 3859 Priority Date: 07/19/1945 1.5000 acft Bureau of Reclamation, United States of America Underground Water Well 51-6961 APPL CERT A16738 3859 Priority Date: 07/19/1945 1.5000 acft Bureau of Reclamation, United States of America Underground Water Well 51-6962 APPL CERT A16738 3859 Priority Date: 07/19/1945 1.5000 acft Bureau of Reclamation, United States of America Underground Water Well 51-6963 APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well <u>51-6964</u> APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well <u>51-6965</u> APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well 51-6966 APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well 51-6967 UGWC

U24175

Priority Date: / /1934 2.0000 acft

Bureau of Reclamation, United States of America

Underground Water Well <u>51-6955</u> APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well <u>51-6956</u> APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well <u>51-6957</u> APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well 51-6958 APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America

Underground Water Well 51-6959 APPL CERT

A16738 3859

Priority Date: 07/19/1945 1.5000 acft

Bureau of Reclamation, United States of America Provo Area Office

Strawberry River 43-2806 APPL WUC

A17569 a6137

Priority Date: 04/24/1946 0.060 cfs Claim

represents 1.4/72.9 interest in application

Bureau of Reclamation, United States of America Provo Area Office

Strawberry River 43-510 APPL WUC

A17569 a6137

Priority Date: 04/24/1946 0.320 cfs Claim

represents 7.8/72.9 interest in application

Bureau of Reclamation, United States of America Provo Area Office Strawberry River 43-1177 Priority Date: 10/18/1861 Bureau of Reclamation, United States of America Provo Area Office Strawberry River 43-2005 PAC Priority Date: 10/18/1861 Bureau of Reclamation, United States of America Provo Area Office Slab Canyon Stream 43-2007 PAC Priority Date: 10/18/1861 Bureau of Reclamation, United States of America Provo Area Office Strawberry River 43-1398 PAC Priority Date: 10/18/1861 Bureau of Reclamation, United States of America Provo Area Office Strawberry River 43-1275 APPL WUC A17569 a6137 Priority Date: 04/24/1946 1.210 cfs Claim represents a 29.3/72.9 interest in right Bureau of Reclamation, United States of America Provo Area Office Strawberry River 43-1140 APPL WUC A17569 a6137 Priority Date: 04/24/1946 0.300 cfs Claim represents 7.4/72.9 interest in application Bureau of Reclamation, United States of America Provo Area Office Unnamed Spring 43-1151 PAC Priority Date: 10/18/1861 Bureau of Reclamation, United States of America Provo Area Office 43-1137 PAC Water Hollow Priority Date: 10/18/1861 Bureau of Reclamation, United States of America Provo Area Office Strawberry River 43-389 APPL WUC A17569 a6137 1.110 cfs Priority Date: 04/24/1946 Bureau of Reclamation, Provo Area Office, United States of America DEC Jordan River (North Jordan Canal) 59-3510 Priority Date: / /1850 5.300 cfs 24.40 acres Bureau of Reclamation, The Secretary of the Interior Green River <u>43-12364</u> APPL LAP A7781 9825.000 cfs Priority Date: 06/22/1918 Bureau of Reclamation, United State of America <u>51-2321</u> UGWC Underground Water Well U14046 Priority Date: / /1914 0.027 cfs Bureau of Reclamation, United State of America Jordan River 57-7638 DEC

Priority Date: / /1855 0.600 cfs

Bureau of Reclamation, United State of America 31-3991 Underground Water Well APPL WUC A40101 Priority Date: 07/20/1970 0.015 cfs Bureau of Reclamation, United States of America Underground Drain 31-3945 APPL WUC A39228 Priority Date: 02/17/1969 0.100 cfs 26.0000 acft 214.83 supplemental acres in Sec. 26 Bureau of Reclamation, United States of America Underground Water Drain 31-3137 PAC Priority Date: / /1930 0.100 cfs supplemental with 31-3137, 31-3138, and 31-3139 Bureau of Reclamation, United States of America 31-3937 Underground Water Drain APPL WUC A39104 1.000 cfs 95.4800 Priority Date: 11/13/1968 acft Bureau of Reclamation, United States of America a33516 Underground Water Wells (4-existing) APP Priority Date: 09/13/2007 15.8000 acft Bureau of Reclamation, United States of America 53<u>-1152</u> Unnamed Spring PAC Priority Date: / /1853 Bureau of Reclamation, United States of America Currant Creek 43-856 DIL D5869 Priority Date: 10/18/1861 Bureau of Reclamation, United States of America Unnamed Spring 43-868 PAC D5869 Priority Date: 10/18/1861 0.020 cfs Bureau of Reclamation, United States of America Underground Water Drain 31-2539 APPL WUC 5751 A25943 Priority Date: 06/28/1954 2.000 cfs Bureau of Reclamation, United States of America Underground Water Well a20059 WD Priority Date: 06/03/1996 1.5000 acft Bureau of Reclamation, United States of America Underground Water Well a20060 MD Priority Date: 06/03/1996 1.5000 acft Bureau of Reclamation, United States of America Underground Water Well a20061 WD

1.5000 acft

Priority Date: 06/03/1996

Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20062</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20063</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20064</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20065</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20066</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20067</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20068</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20069</u> 1.5000 acft	WD
Bureau of Reclamation, United States of America Underground Water Well Priority Date: 06/03/1996	<u>a20070</u> 1.5000 acft	WD
Bureau of Reclamation,		
Deer Creek Reservoir and Main Creek Priority Date: 04/22/2010	<u>t36462</u> 22.0000 acft	LAP
Bureau of Reclamation, 12 Underground Water Wells (3 existing) Priority Date: 08/30/2000	<u>a24880</u> 25.000 cfs	APP
Bureau of Reclamation, Provo Area Office, United States Jordan River (North Jordan Canal) Priority Date: / /1850	of America <u>59-3510</u> DEC 5.300 cfs 24	.40 acres
Bureau of Reclamation, The Secretary of the Interior Green River	43-12364 APPL	LAP
A7781 Priority Date: 06/22/1918	9825.000 cfs	
Bureau of Reclamation, United State of America Underground Water Well	<u>31-3991</u> APPL	WUC
A40101 Priority Date: 07/20/1970	0.015 cfs	

Bureau of Reclamation, United State of America Jordan River Priority Date: / /1855	57-7638 DEC 0.600 cfs	
Bureau of Reclamation, United State of America Underground Water Well U14046	<u>51-2321</u> UGWC	
Priority Date: / /1914	0.027 cfs	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6960</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6961</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6962</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6963</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6964</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6965</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6966</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well U24175	<u>51-6967</u> UGWC	
Priority Date: / /1934	2.0000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6955</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6956</u> APPL	CERT
Priority Date: 07/19/1945	1.5000 acft	

Bureau of Reclamation, United States of America Underground Water Well A16738 3859	<u>51-6957</u>	APPL	CERT
Priority Date: 07/19/1945	1.5000	acft	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859 Priority Date: 07/19/1945	<u>51-6958</u> 1.5000	APPL	CERT
-	1.0000	4010	
Bureau of Reclamation, United States of America Underground Water Well A16738 3859	51-6959	APPL	CERT
Priority Date: 07/19/1945	1.5000	acft	
Bureau of Reclamation, United States of America Unnamed Spring Priority Date: / /1853	<u>53-1152</u>	PAC	
Bureau of Reclamation, United States of America Currant Creek D5869 Priority Date: 10/18/1861	43-1593	DIL	WUC
Bureau of Reclamation, United States of America Currant Creek D5869 Priority Date: 10/18/1861	<u>43-856</u>	DIL	
Bureau of Reclamation, United States of America Unnamed Spring D5869	43-868	PAC	
Priority Date: 10/18/1861	0.020	cfs	
Bureau of Reclamation, United States of America Underground Water Wells(4-existing) Priority Date: 09/13/2007	<u>a33516</u> 15.8000	acft	APP
Bureau of Reclamation, United States of America Provo	Area Office		
Strawberry River Priority Date: 10/18/1861	43-1177	PAC	
Bureau of Reclamation, United States of America Provo A Strawberry River A17569 a6137	Area Office 43-510	APPL	WUC
Priority Date: 04/24/1946 represents 7.8/72.9 interest in application	0.320	cfs Cla	im
Bureau of Reclamation, United States of America Provo A Strawberry River Priority Date: 10/18/1861	Area Office 43-2005	PAC	
Bureau of Reclamation, United States of America Provo A Slab Canyon Stream Priority Date: 10/18/1861	Area Office 43-2007	PAC	
Bureau of Reclamation, United States of America Provo A Strawberry River	Area Office 43-389	APPL	WUC

A17569 a6137

Priority Date: 04/24/1946 1.110 cfs

Bureau of Reclamation, United States of America Provo Area Office

Strawberry River 43-1398 PAC

Priority Date: 10/18/1861

Bureau of Reclamation, United States of America Provo Area Office

Strawberry River 43-2806 APPL WUC

A17569 a6137

Priority Date: 04/24/1946 0.060 cfs Claim

represents 1.4/72.9 interest in application

Bureau of Reclamation, United States of America Provo Area Office

Water Hollow 43-1137 PAC

Priority Date: 10/18/1861

Bureau of Reclamation, United States of America Provo Area Office

Strawberry River 43-1140 APPL WUC

A17569 a6137

Priority Date: 04/24/1946 0.300 cfs Claim

represents 7.4/72.9 interest in application

Bureau of Reclamation, United States of America Provo Area Office

Unnamed Spring 43-1151 PAC

Priority Date: 10/18/1861

Bureau of Reclamation, United States of America Provo Area Office

Strawberry River 43-1275 APPL WUC

A17569 a6137

Priority Date: 04/24/1946 1.210 cfs Claim

represents a 29.3/72.9 interest in right

Bureau of Reclamation, United States of America Provo Area Office

Strawberry River 43-7103 PAC

Priority Date: 10/18/1861

Bureau of Reclamation, United States of America,

Currant Creek (Job Creek) 53-965 DIL

Priority Date: / /1857 1.4000 acft